



Everybody



Sherpur Polytechnic Institute

Subject Name: Cyber Security and Ethics
Subject Code: 66675

Technology: Computer
Semester: 7th
Shift: 2nd

Topic 1

Understand Cyber Security

Learning outcome:

At the end of this session learner's will be abl

To define the Cyber security.

To classify the Cyber security.

**To distinguish between Information security
and Cyber security.**

Define is Cyber Security.

Cyber security refers to the body of technologies, processes, and practices designed to protect networks, devices, programs, and data from attack, damage, or unauthorized access.

Cyber security may also be referred to as information technology security.

Classify Cyber Security.

1. Application Security
2. Information Security
3. Network Security
4. Operational Security

Cyber Security.

Network security is the practice of securing a computer network from intruders, whether targeted attackers or opportunistic malware.

Application security focuses on keeping software and devices free of threats. A compromised application could provide access to the data its designed to protect. Successful security begins in the design stage, well before a program or device is deployed.

Cyber Security.

Information security protects the integrity and privacy of data, both in storage and in transit.

Operational security includes the processes and decisions for handling and protecting data assets. The permissions users have when accessing a network and the procedures that determine how and where data may be stored or shared all fall under this umbrella.

Describe the necessity and role of cyber security.

In today's connected world, everyone benefits from advanced cyberdefense programs. At an individual level, a cybersecurity attack can result in everything from identity theft, to extortion attempts, to the loss of important data like family photos. Everyone relies on critical infrastructure like power plants, hospitals, and financial service companies. Securing these and other organizations is essential to keeping our society functioning.

Describe the necessity and role of cyber security.

- Everyone also benefits from the work of cyberthreat researchers, like the team of 250 threat researchers at Talos, who investigate new and emerging threats and cyber attack strategies. They reveal new vulnerabilities, educate the public on the importance of cybersecurity, and strengthen open source tools.

Distinguish between Information security and Cyber security.

CYBER SECURITY

It is the practice of protecting the data from outside the resource on the internet.

It is about the ability to protect the use of cyberspace from cyber attacks.

INFORMATION SECURITY

It is all about protecting information from unauthorized user, access and data modification or removal in order to provide confidentiality, integrity, and availability.

It deals with protection of data from any form of threat.

CYBER SECURITY

Cybersecurity to protect anything in the cyber realm.

Cybersecurity deals with danger against cyberspace.

Cybersecurity strikes against Cyber crimes, cyber frauds and law enforcement.

On the other hand cyber security professionals with cyber security deals with advanced persistent threat.

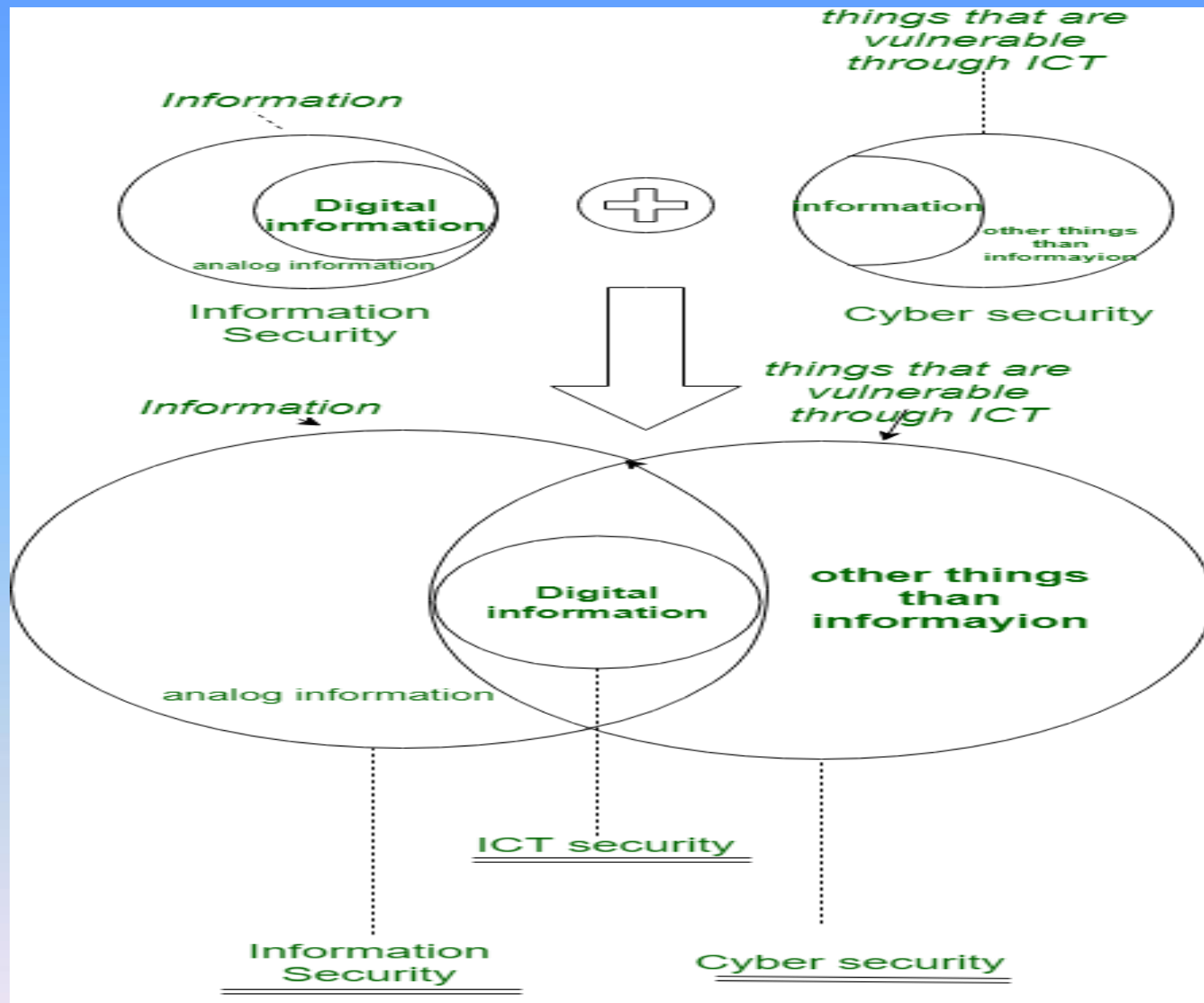
INFORMATION SECURITY

Information security is for information irrespective of the realm.

Information security deals with the protection of data from any form of threat.

Information security strives against unauthorised access, disclosure modification and disruption.

Information security professionals is the foundation of data security and security professionals associated with it prioritize resources first before



Question



Topic 2

Data and Evidence Recovery

Learning outcome:

At the end of this session learner's will be abl

To define data recovery.

To define file recovery.

To know about DiskGenius.

Data recovery and File recovery

Data recovery is the process of restoring **data** that has been lost, accidentally deleted, corrupted or made inaccessible. In enterprise IT, **data recovery** typically refers to the restoration of **data** to a desktop, laptop, server or external storage system from a backup.

File recovery is the process of rebuilding or **recovering** lost **files** from a disk or hard drive that is no longer operational or was damaged from unnatural causes.

Forensic Toolkit or FTK

Forensic Toolkit or FTK is a computer forensics software made by AccessData. It scans a hard drive looking for various information. It can, for example, locate deleted emails and scan a disk for text strings to use them as a password dictionary to crack encryption.

The toolkit also includes a standalone disk imaging program called **FTK Imager**. This tool saves an image of a hard disk in one file or in segments that may be later on reconstructed. It calculates MD5 hash values and confirms the integrity of the data before closing the files. The result is an image file(s) that can be saved in several formats, including DD raw

Data recovery techniques:

Main DiskGenius data recovery techniques:

- Deleted **file recovery** and recycle bin **data recovery**.
- Formatted **file recovery**; reformatted **file recovery**.
- Raw **recovery**.
- **Hard drive partition recovery**.
- **Lost data recovery**.

DiskGenius data recovery techniques are very simple because it offers DIY data recovery software. Let's see how to recover lost data with DiskGenius data recovery techniques.

Step 1 Download and install DiskGenius.

Firstly, download and install DiskGenius on your computer. This software offers advanced data recovery techniques to help you recover lost data from any data loss disaster.

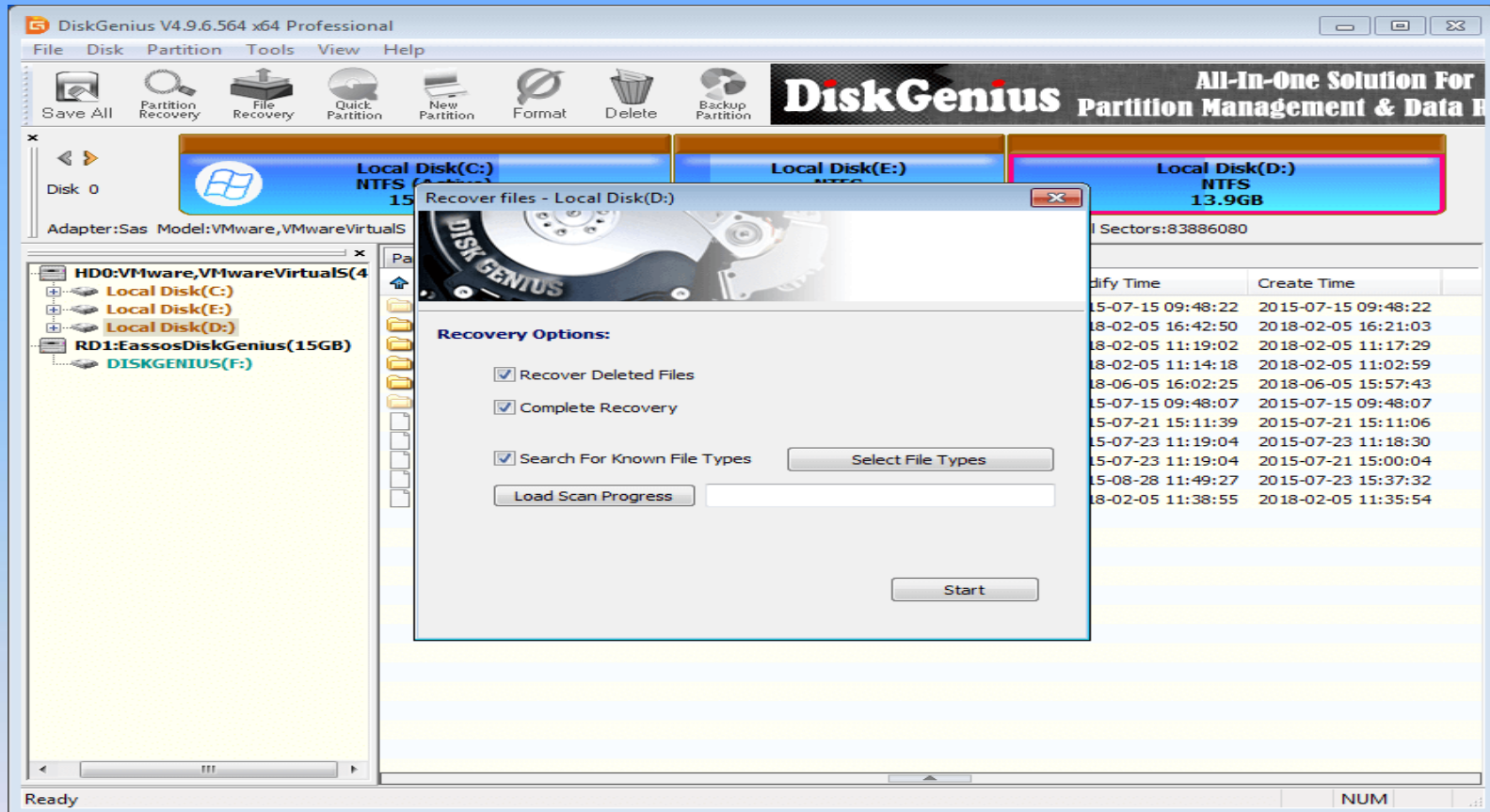
Step 2 Choose hard drive where your data is lost.

Just run DiskGenius on your computer, it will list all hard drives on your computer. Just select the hard drive where your data is lost.

Step 3 Scan the hard drive to find lost data.

Now, click "File Recovery". You will see a window to let you start to scan the hard drive. Just let it scan your hard drive to find lost data.

Step 4 Preview and recover lost data. After scanning, just preview and recover lost data easily.





DiskGenius

All-In-One Solution For Partition Management & Data Recovery

Disk 0

- Local Disk(C:) NTFS (Active) 15.6GB
- Local Disk(E:)
- Local Disk(Recover files)(D:) NTFS 13.9GB

Adapter:Sas Model:VMware,VMwareVirtualS Capacity:40.0

Partitions Files

Name: *

- HD0:VMware,VMwareVirtualS(4)
 - Local Disk(C:)
 - Local Disk(E:)
 - Local Disk(Recover files)(D:)
 - Local Disk(Current)(D)
 - \$Extend
 - \$RECYCLE.BIN
 - debug1
 - DiskGenius
 - DiskGenius-new
 - photos
 - System Volume Inform
 - Recovered Types(1)
 - Photo Files
 - Graphic Files
 - Other Files
 - Local Disk(Recognize)
 - RD1:EassosDiskGenius(15GB)
 - DISKGENIUS(F:)

Preview(P)

- Copy To(S)...
- Copy To "Desktop"(D)
- Copy To "My Documents"(M)
- New Folder(N)
- Rename(R)
- Copy Files To Current Partition(W)
- Delete Files Directly(E)
- Delete Files Permanently(P)
- Go To File Data Sector
- Show Occupied Clusters List
- Show Root Directory's Clusters List
- Copy Text : "mmexport1478009917313.jpg"
- Select All(A)
- Unselect All(U)

Sectors:83886080

System Duplicate Filter

File Name	Modify Time	Create Time
mmexport1478009917313.jpg	-11-03 12:42:54	2018-06-05 15:57:53
mmexport1478009917313.jpg	-11-03 12:42:54	2018-06-05 15:57:53
mmexport1478009917313.jpg	-11-03 12:42:54	2018-06-05 15:57:53
mmexport1478009917313.jpg	-11-03 12:42:54	2018-06-05 15:57:53
mmexport1478009917313.jpg	-11-03 12:42:54	2018-06-05 16:01:37
mmexport1478009917313.jpg	-11-03 12:42:54	2018-06-05 15:57:53
mmexport1478009917313.jpg	-11-03 12:42:54	2018-06-05 15:57:53
mmexport1478009917313.jpg	-11-03 12:42:54	2018-06-05 16:01:37
mmexport1478009917313.jpg	-11-03 12:42:54	2018-06-05 15:57:53
mmexport1478009917313.jpg	-11-03 12:42:56	2018-06-05 15:57:53
mmexport1478009917313.jpg	-11-03 12:42:56	2018-06-05 15:57:53
mmexport1478009917313.jpg	-11-03 12:42:56	2018-06-05 15:57:53
mmexport1478009917313.jpg	-11-03 12:42:56	2018-06-05 15:57:51
mmexport1478009917313.jpg	-11-03 23:00:10	2018-06-05 16:01:37



0000: FF D8 FF E0 00 10 4A 46 49 46 00 01 01 00 00 01JFIF.....
0010: 00 01 00 00 FF E1 00 30 45 78 69 66 00 00 4D 4D0Exif..M...
0020: 00 2A 00 00 00 08 00 01 01 31 00 02 00 00 00 0E	..*.....1.....
0030: 00 00 00 1A 00 00 00 00 77 77 77 2E 6D 65 69 74www.meit...
0040: 75 2E 63 6F 6D 00 FF DB 00 43 00 01 01 01 01 01	u.com....C.....
0050: 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01
0060: 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01
0070: 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01
0080: 01 01 01 01 01 01 01 01 01 01 01 01 01 FF DB 00 43 01C.....
0090: 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01

Copy currently selected files to a specified folder.

Selected: 80.6MB / 42 Files.

NUM

colourbox



QUESTION

Topic 3
Cyber Crime

Learning outcome:

At the end of this session learner's will be abl

To define Cyber Crime.

To classify different types of Cyber Crimes.

Cyber Crime

Cybercrime, or **computer-oriented crime**, is a crime that involves a computer and a network. The computer may have been used in the commission of a crime, or it may be the target. Cybercrimes can be defined as: "Offences that are committed against individuals or groups of individuals with a criminal motive to intentionally harm the reputation of the victim or cause physical or mental harm, or loss, to the victim directly or indirectly, using modern telecommunication networks such as Internet (networks including chat rooms, emails, notice boards and groups) and mobile phones (Bluetooth/SMS/MMS)". Cybercrime may threaten a person or a nation's security and financial health.

There are many kinds of Cyber Crime like as Identity threats ,Cyber Bullying ,Phishing , Scamming etc.

1. Identity Threats :

Identity theft is when a cybercriminal gains access to your personal information to steal money or gain other benefits. Even if you think cybercriminals have only a small amount of information, it can still be enough to find more about you, including photos or information about your family. This can be used to create fake identity documents in your name or apply for real identity documents in your name, but with another person's photograph.

Various types of Cyber Crimes

2.Cyber Bullying:

Cyberbullying is bullying that takes place over digital devices like cell phones, computers, and tablets.

Cyberbullying can occur through SMS, Text, and apps, or online in social media, forums, or gaming where people can view, participate in, or share content.

Cyberbullying includes sending, posting, or sharing negative, harmful, false, or mean content about someone else.

Various types of Cyber Crimes

3. Phishing:

Phishing is the practice of sending fraudulent emails that resemble emails from reputable sources. The aim is to steal sensitive data like credit card numbers and login information. It's the most common type of cyber attack.

Various types of Cyber Crimes

4. Cyber extortion:

Cyber extortion is an online crime in which hackers hold our data, website, computer systems, or other sensitive information hostage until we meet their demands for payment. Cyber extortion often takes the form of ransomware and distributed denial-of-service (DDoS) attacks, both of which could paralyze your business.

Define Malware

“**Malware**” is short for “**malicious software**” - **computer** programs designed to infiltrate and damage **computers** without the users consent.

“**Malware**” is the general term covering all the different types of threats to our **computer** safety such as viruses, spyware, worms, trojans, rootkits and so on.

Spyware

- **Spyware** is a software that aims to gather information about a person or organization, sometimes without their knowledge, and send such information to another entity without the consumer's consent. Furthermore, spyware asserts control over a device without the consumer's knowledge, sending confidential information to another entity with the consumer's consent, through cookies.

Worm

A computer worm is a type of malware that spreads copies of itself from computer to computer. A worm can replicate itself without any human interaction, and it does not need to attach itself to a software program in order to cause damage.

Trojan

A Trojan horse or Trojan is a type of malware that is often disguised as legitimate software. Trojans can be employed by cyber-thieves and hackers trying to gain access to users' systems.

Ransomware

Ransomware is a type of malicious software. It is designed to extort money by blocking access to files or the computer system until the ransom is paid. Paying the ransom does not guarantee that the files will be recovered or the system restored.

Question



Topic 4

Hacking

Learning outcome:

At the end of this session learner's will be able

To define hacking and hacker.

To classify different types of hackings and hacker.

Hacking

Hacking:

Hacking is an attempt to exploit a computer system or a private network inside a computer. Simply put, it is the unauthorised access to or control over computer network security systems for some illicit purpose.

Hacking with its classification:

1. Website hacking
2. Network hacking
3. Email hacking
4. Ethical hacking
5. Password Hacking
6. Computer hacking

1. Website Hacking:

Hacking means carrying unauthorized access of a **website** or the **website** details. For example if someone opens another person's e-mail without knowing the password, then it is termed as **hacking**.

Hacking a **website** means taking control from the **website** owner to a person who hacks the **website**.

2.Network Hacking:

In computer **networking**, **hacking** is any technical effort to manipulate the normal behavior of **network** connections and connected systems. A **hacker** is any person engaged in **hacking**.

3. Email Hacking:

Email hacking is the unauthorized access to, or manipulation of, an email account or email correspondence.

4.Ethical Hacking:

- An ethical hacker, also referred to as a white hat hacker, is an information security expert who systematically attempts to penetrate a computer system, network, application or other computing resource on behalf of its owners -- and with their permission -- to find security vulnerabilities that a malicious hacker could potentially exploit.

5. Password Hacking:

Password hacking, sometimes referred to as password cracking, is a method of recovering passwords from data transmitted by or stored on a computer.

6. Computer Hacking:

Computer **hacking**, on one hand, describes the activities practiced by individuals, organizations, and nations, in order to gain unauthorized access to computer and technology dependent systems. These activities may involve the modification or alteration of system's software and hardware in order to perform activities neither purposed by the creator nor in line with the creator's original intentions.

Define Hacker

Skilled computer programmer who breaks (hacks) a password code, or otherwise gains remote access to a protected computer system, mainly for the thrill of it. Unlike a 'cracker,' a hacker may or may not also perform a criminal action such as alteration or stealing of data, or transfer of funds.

Different type of Hackers

There are three main types of hackers:

- Black hat hacker;
- White hat hacker;
- Grey hat hacker.

1. WHITE HAT HACKER

The white hat hacker is a good guy, as ironic as it may sound. White Hackers, white hat hackers or ethical hackers are the people who test existing internet infrastructures to research loopholes in the system. They create algorithms and perform multiple methodologies to break into systems, only to strengthen them.

2. BLACK HAT HACKER

Black hat hackers are responsible for all that is wrong with hacking. These guys break into systems purely with negative intentions. From stealing credit card information, to altering public databases, a black hat hacker looks to gain fame or monetary benefits from exploiting the loopholes in internet frameworks. Famous black hat hackers have notoriously robbed banks and financial institutions of millions of dollars, and invaluable private data.

3.GREY HAT HACKER

A grey hat hacker usually has mixed intentions. As the color code implies, this hacker type does not have the good intentions of a white hat hacker, nor does he have the ill intentions of a black hacker. A grey hat would break into systems but never for his own benefit.

Famous grey hat hackers have exploited systems only to make the information public, and to bring to limelight vast datasets of information that contains wrongdoings.



Topic 5

The Basics of Security

Learning outcome:

At the end of this session learner's will be able

To define firewall.

To classify different types of firewall.

Firewall

A computer firewall is a software program that prevents unauthorized access to or from a private network. Firewalls are tools that can be used to enhance the security of computers connected to a network, such as LAN or the Internet. They are an integral part of a comprehensive security framework for your network.

Different types of firewalls

Packet Filter Firewall controls the network access by analyzing the outgoing and incoming packets. It lets a packet pass or block its way by comparing it with pre-established criteria like allowed IP addresses, packet type, port number, etc. Packet filtering technique is suitable for small networks but gets complex when implemented to larger networks. It is to be noted that these types of firewalls cannot prevent all types of attacks. They can neither tackle the attacks that use application layers vulnerabilities nor can fight against spoofing attacks.

Stateful Inspection

Stateful Packet Inspection (SPI), which is also sometimes called dynamic packet filtering, is a powerful firewall architecture which examines traffic streams from end to end. These smart and fast **firewalls** use an intelligent way to ward off the unauthorized traffic by analyzing the packet headers and inspecting the state of the packets along with providing proxy services. These firewalls works at the network layer in the OSI model and are more secured than the basic packet filtering firewalls.

Proxy Server Firewalls

Proxy Server Firewalls are the most secured type of firewalls that effectively protect the network resources by filtering messages at the application layer.

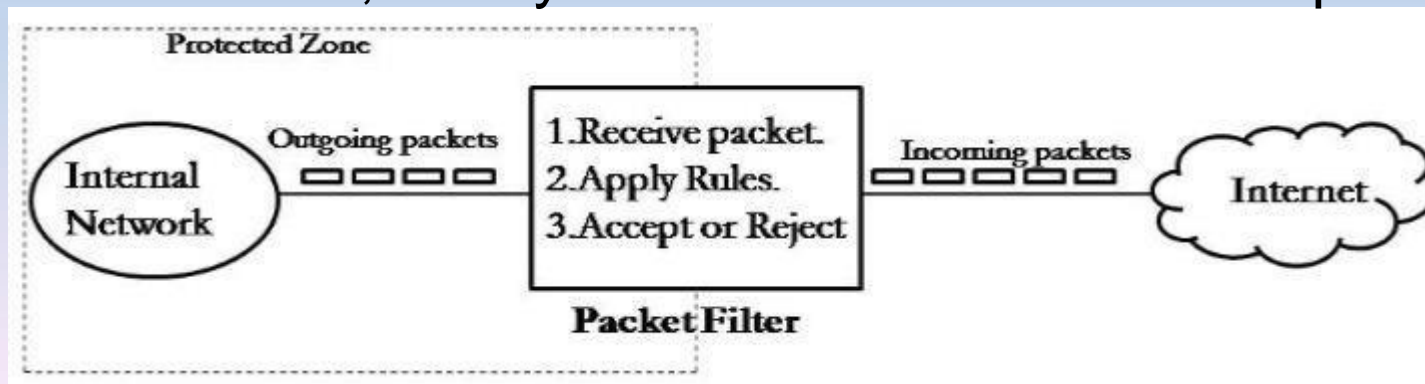
Proxy **firewalls** mask your IP address and limit traffic types. They provide a complete and protocol-aware security analysis for the protocols they support. Proxy Servers offers the best Internet experience and results in the network performance improvements.

1. Packet Filter:

A packet filter firewall (figure 1) examines packets up to the network layer and can only filter packets based on the information that is available at the network layer.

The information at this layer includes the source IP address, the destination IP address, the source port, the destination port, and the TCP flag bits. Such a firewall can filter packets based on ingress or egress, that is, it can have different filtering rules for incoming and outgoing packets.

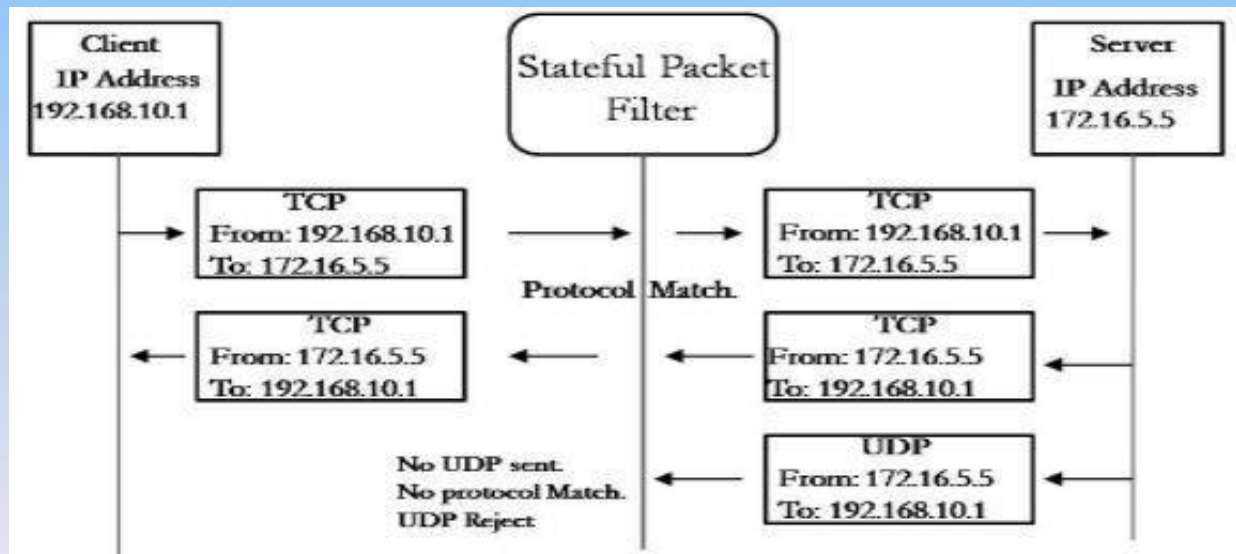
A packet filter receives packets and passes them through a set of rules, if they match the rules then accept or reject.



2. Stateful Packet Filter:

A stateful packet filter (figure 2) adds state to a packet filter firewall which means that the firewall keeps track of TCP connections and can remember UDP connections as well.

A stateful packet filter operates at the transport layer, since it maintains information about connections.

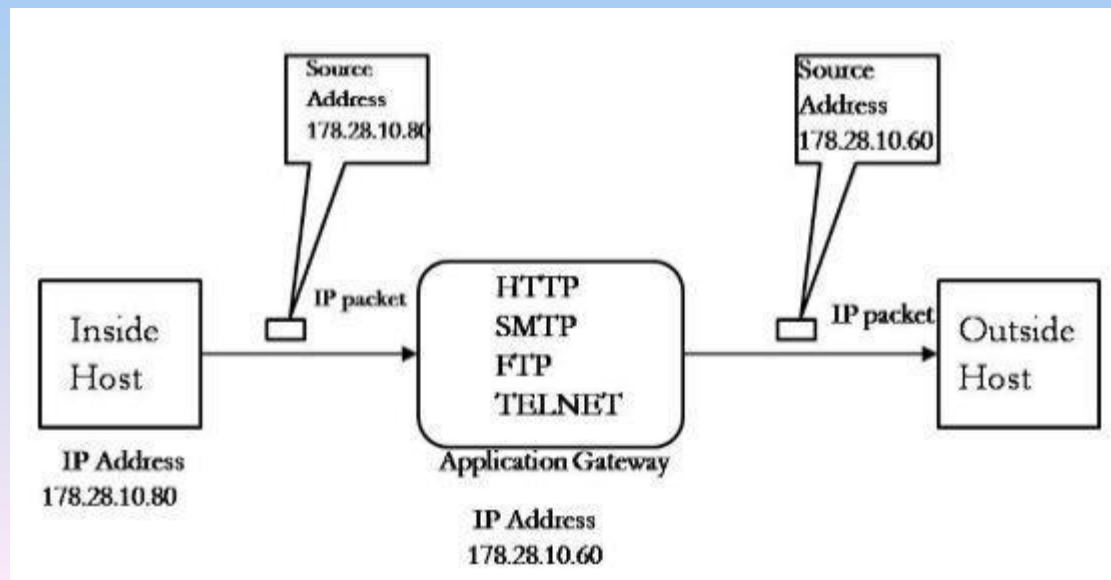


3. Application Proxy:

An application proxy firewall processes incoming packets all the way up to the application layer.

The firewall (figure 3) acting on your behalf then verifies the packet that appears to be legitimate and also verifies that the actual data inside the packet is safe.

One interesting feature of an application proxy is that the incoming packet is destroyed and a new packet is created in its place when the data passes through the firewall. This looks like a minor and insignificant but it is actually a security feature.





Topic 6

Cyber Ethics

Learning outcome:

At the end of this session learner's will be able

To define cyber ethics.

To know about Various laws of Bangladesh about cyber security.

Cyber Ethics

Cyber Ethics:

Cyber ethics Moral Values in Cyber Space The Good, the Bad, and the Electronic.

Cyber ethics is the study of moral, legal, and social issues involving cybertechnology.

Ethical hacking

Ethical hacking and **ethical hacker** are terms used to describe hacking performed by a company or individual to help identify potential threats on a computer or network. An ethical hacker attempts to bypass system security and search for any weak points that could be exploited by malicious hackers. This information is then used by the organization to improve the system security, to minimize or eliminate any potential attacks. The purpose of **ethical hacking** is to evaluate the security of and identify vulnerabilities in systems, networks or system infrastructure.

Various laws of Bangladesh about cyber security

- *The **Information and Communication Technology (ICT) Act, 2006** came in force on 8 October, 2006. Subsequently, the government amended the Act in 2008 and in 2009. For the better application of the Act, the government passed Information Technology (Certificate Authority) rules in 2010. But these laws alone are not enough. To face the challenges growing in cyber space it is essential to amend the existing laws such as the Penal Code 1860, the Evidence Act 1872, the Contract Act 1872 etc. It is hoped that these Acts will be modified in accordance with the demand of time. However, there are some provisions in the ICT Act, 2006 which mention penalties for various cyberspace related crimes. For instance, section 54 (1) of this Act declares the offences concerning cyberspace. Then, section-54(2) says, “If any person commits offences under sub-section (1) of this section, he shall be punishable with imprisonment for a term which may extend to ten years, or with fine which may extend to taka ten lakhs, or with both”.*

Various laws of Bangladesh about cyber security

If any person—

(a) with the intent to cause or knowing that he is likely to cause wrongful loss or damage to the public or any person, does any act and thereby destroys, deletes or alters any information residing in a computer resource or diminishes its value or utility or affects it injuriously by any means;

Various laws of Bangladesh about cyber security

- (b) damage through illegal access to any such computer, computer network or any electronic system which do not belong to him; then such activity shall be treated as hacking offence;

Various laws of Bangladesh about cyber security

- (c) whoever commits hacking offence under sub-section (1) of this section, he shall be punishable with imprisonment for a term which may extend to ten years, or with fine which may extend to taka one crore , or with both.”

We can see that law has taken the matter of cyber-crimes in consideration and there are some strict rules regarding it.



Job no:01

Name of the job:

Apply password to a computer system and various files such as Microsoft Excel, Microsoft Access etc.

Learning outcome:

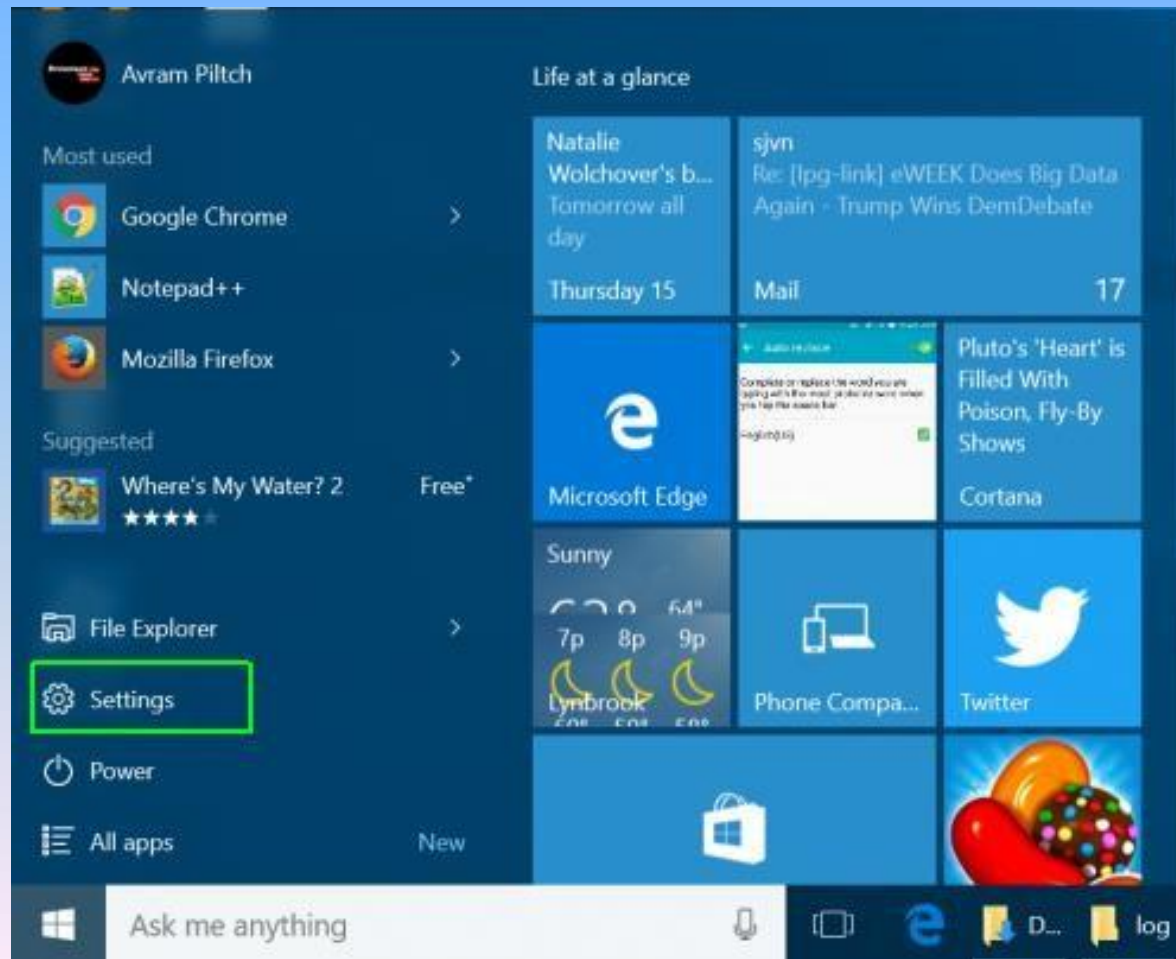
After completion this job student will be able

To give password any file.

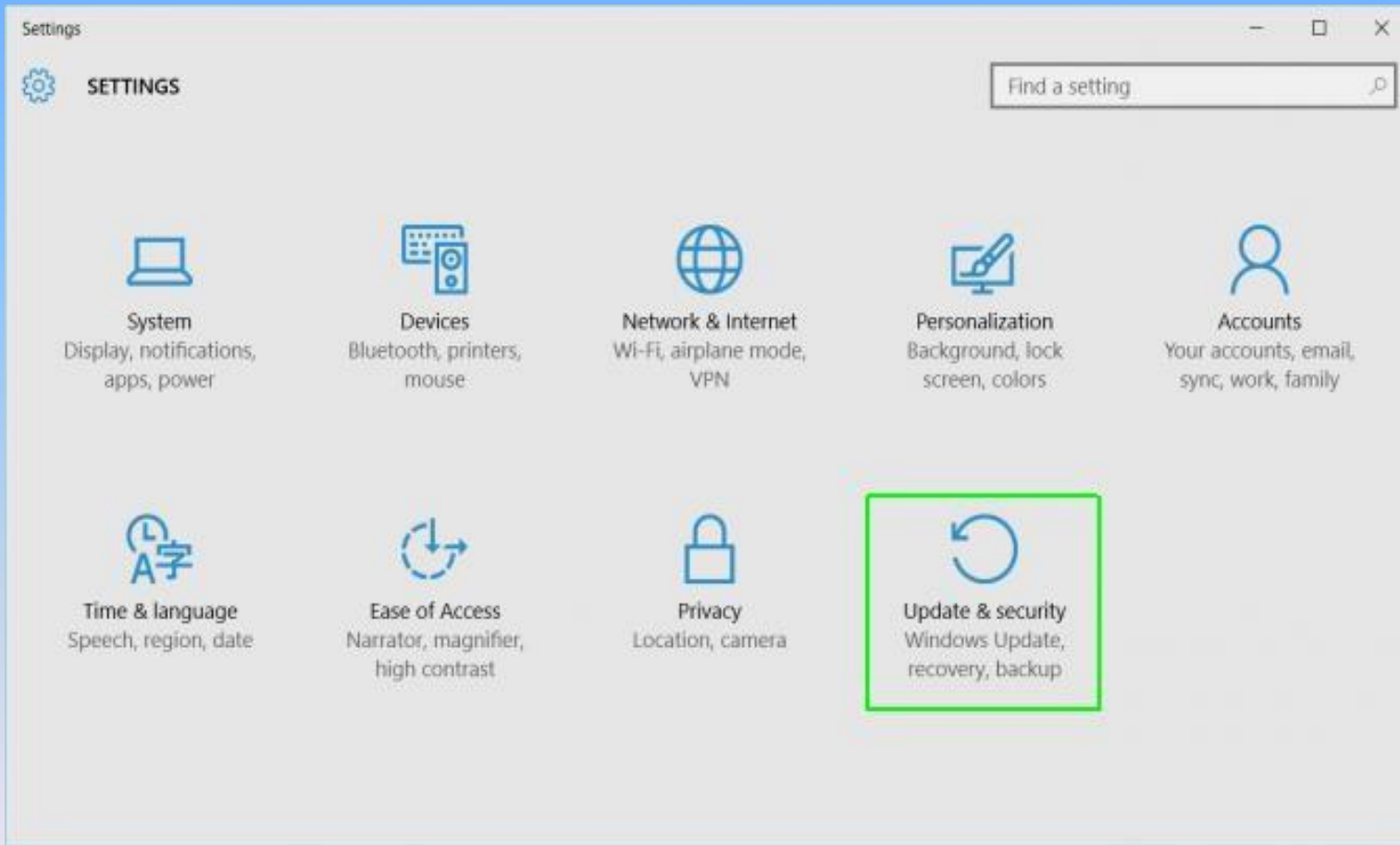
Password

A password, sometimes called a passcode, is a memorized secret used to confirm the identity of a user. Using the terminology of the NIST Digital Identity Guidelines, the secret is memorized by a party called the claimant while the party verifying the identity of the claimant is called the verifier

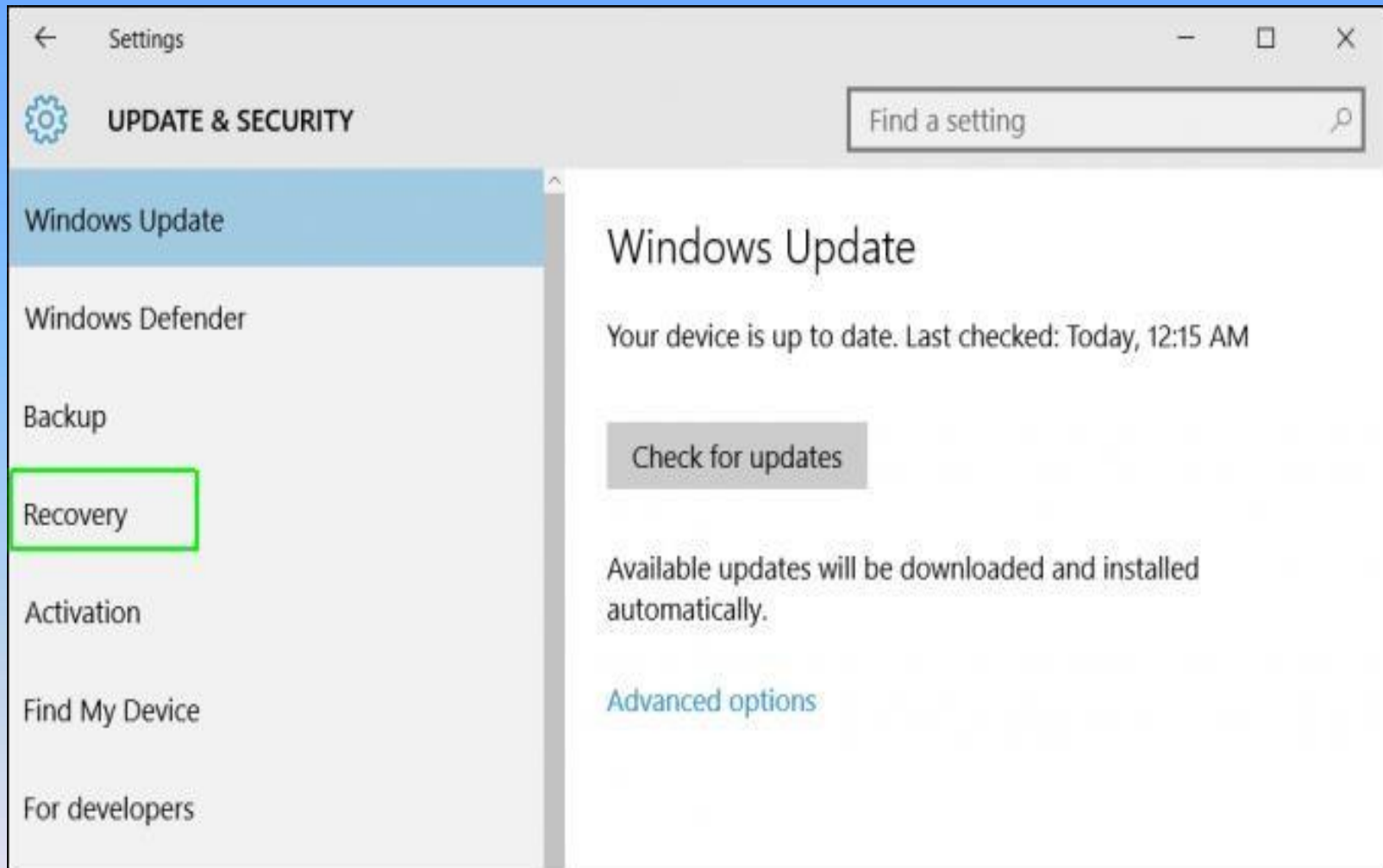
How to Enter the BIOS on a Windows 10 PC Navigate to settings. We can get there by clicking the gear icon on the Start menu.



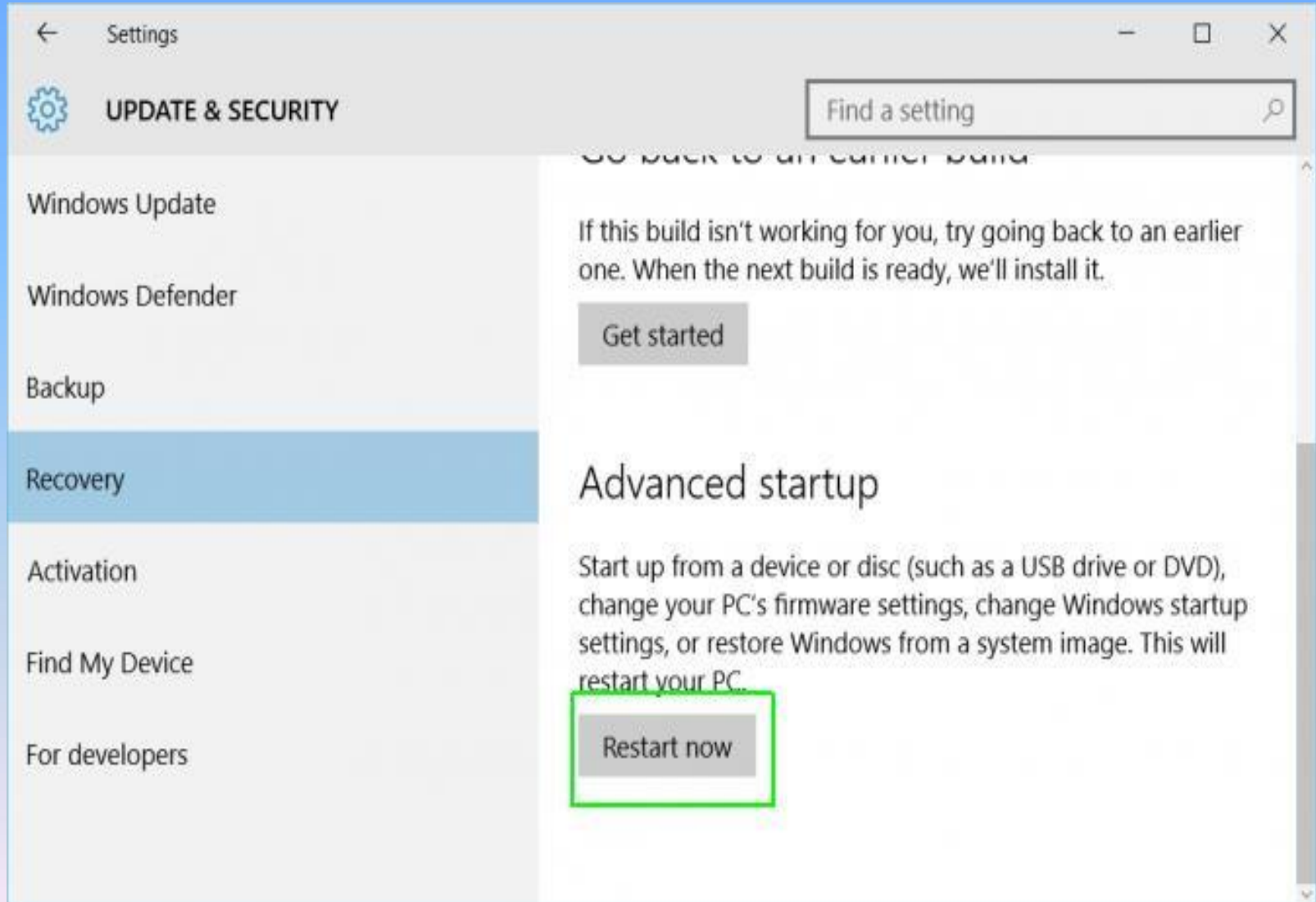
2. Select Update & security.



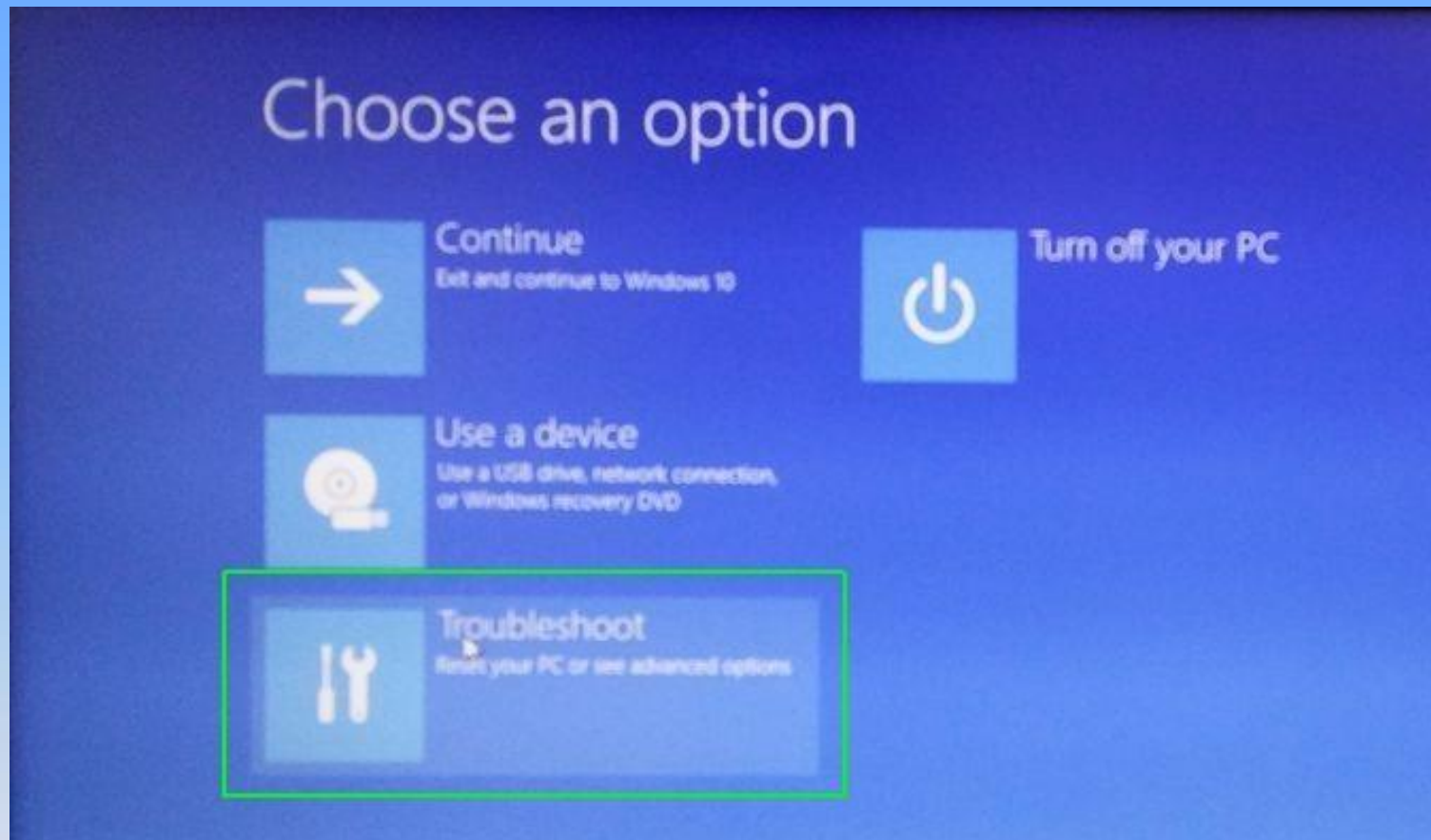
3. Select Recovery from the left menu.



4. **Click Restart Now** under Advanced startup. The computer will reboot to a special menu.



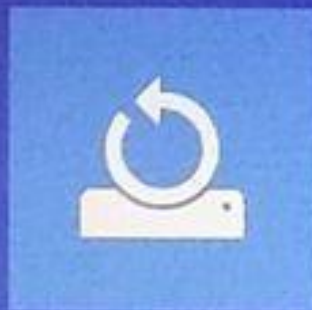
5. Click Troubleshoot.



6. Click Advanced options.



Troubleshoot



Reset this PC

Lets you choose to keep or remove your files, and then reinstalls Windows.



Advanced options

7. Select UEFI Firmware Settings. If you don't see this icon, then press Startup Settings, instead. When your PC is restarting, tap F1 (or F2) to access the BIOS.



8. Click on Restart.



Our system will restart and take us to the BIOS.

Create an Ms Word file and save it with a password for open and edit.

- At first open Microsoft word program.
- Then Save file.

After Save the file then click on File Menu.
Click on Protect Document

The screenshot shows the Microsoft Word interface for a document named 'bios'. The 'File' menu is open, and the 'Info' tab is selected. The 'Protect Document' option is highlighted with a blue circle and a blue arrow pointing to it. The 'Info' tab displays 'Information about bios' for the file 'D:\JAS\bios.docx'. The 'Permissions' section indicates that 'Anyone can open, copy, and change any part of this document.' The 'Prepare for Sharing' section lists 'Document properties and author's name' as a content type. The 'Versions' section states 'There are no previous versions of this file.' The right-hand pane shows document properties such as Size (531KB), Pages (4), Words (76), and Total Editing Time (22 Minutes).

File Home Insert Page Layout References Mailings Review View Add-Ins

Save Save As Open Close

Info

Recent

New

Print

Save & Send

Help

Options Exit

Information about bios

D:\JAS\bios.docx

Permissions

Anyone can open, copy, and change any part of this document.

Protect Document

Prepare for Sharing

Before sharing this file, be aware that it contains:

- Document properties and author's name

Versions

There are no previous versions of this file.

Properties

Size	531KB
Pages	4
Words	76
Total Editing Time	22 Minutes
Title	Add a title
Tags	Add a tag
Comments	Add comm...

Related Dates

Last Modified	Today, 9:53 ...
Created	Today, 9:31 ...
Last Printed	Never

Related People

Author	Computer CI
	Add an aut...
Last Modified By	Computer CI

Click on Encrypt with password

The screenshot shows the Microsoft Word 'Info' pane for a document titled 'Information about bios'. The document is located at 'D:\JAS\bios.docx'. The 'Permissions' section indicates that 'Anyone can open, copy, and change any part of this document.' A dropdown menu is open under the 'Protect Document' button, listing several options. A blue arrow points to the 'Encrypt with Password' option, which is highlighted with a blue circle. The 'Properties' section on the right shows document details such as size (531KB), pages (4), and words (76).

File Home Insert Page Layout References Mailings Review View Add-Ins

Save
Save As
Open
Close

Info

Recent
New
Print
Save & Send
Help

Options
Exit

Information about bios

D:\JAS\bios.docx

Protect Document

- Mark as Final**
Let readers know the document is final and make it read-only.
- Encrypt with Password**
Require a password to open this document.
- Restrict Editing**
Control what types of changes people can make to this document.
- Restrict Permission by People**
Grant people access while removing their ability to edit, copy, or print.
- Add a Digital Signature**
Ensure the integrity of the document by adding an invisible digital signature.

Permissions
Anyone can open, copy, and change any part of this document.

Properties

Size	531KB
Pages	4
Words	76
Total Editing Time	22 Minutes
Title	Add a title
Tags	Add a tag
Comments	Add comm...

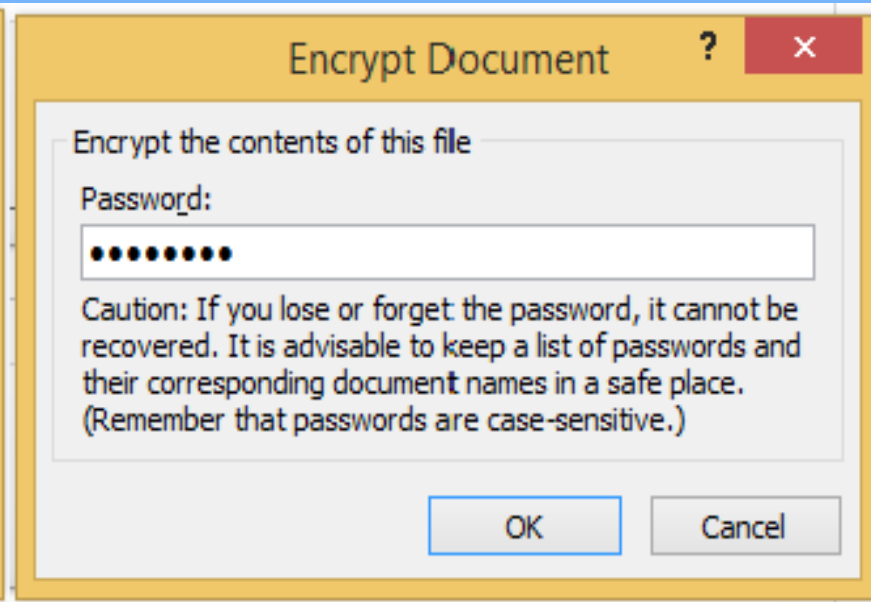
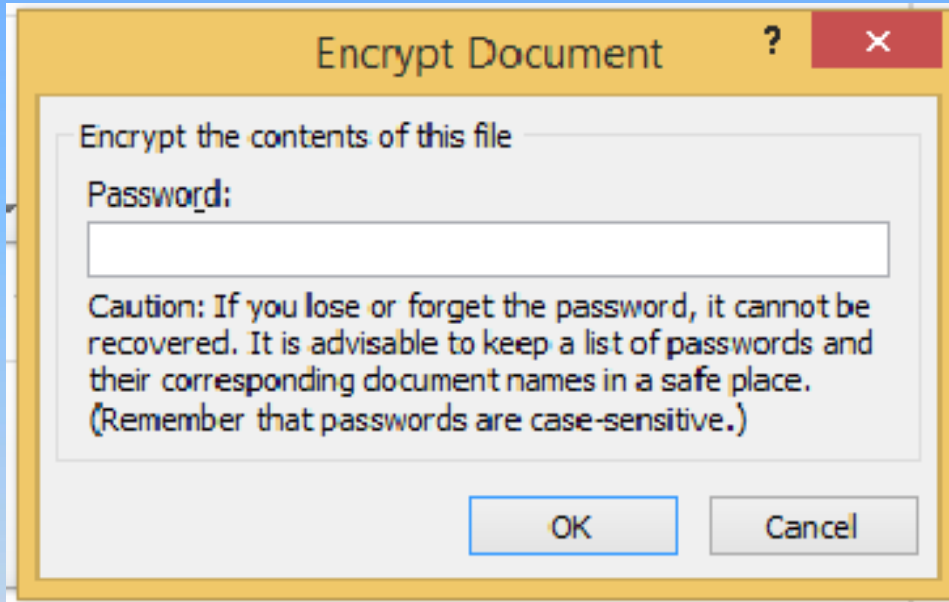
Related Dates

Last Modified	Today, 9:53 ...
Created	Today, 9:31 ...
Last Printed	Never

Related People

Author	Computer CI
	Add an aut...
Last Modified By	Computer CI

Password type then click on OK



Click on Confirm password then click OK

Confirm Password

?

✕

Encrypt the contents of this file

Reenter password:

Caution: If you lose or forget the password, it cannot be recovered. It is advisable to keep a list of passwords and their corresponding document names in a safe place. (Remember that passwords are case-sensitive.)

OK

Cancel

Confirm Password

?

✕

Encrypt the contents of this file

Reenter password:

Caution: If you lose or forget the password, it cannot be recovered. It is advisable to keep a list of passwords and their corresponding document names in a safe place. (Remember that passwords are case-sensitive.)

OK

Cancel

Microsoft Excel and Microsoft Access
File Password are same as Microsoft
Word.

Question

1. What is security?
2. What is password?

Job no:02

Name of the job:

Practice to recover an e-mail forgotten password.

Learning outcome:

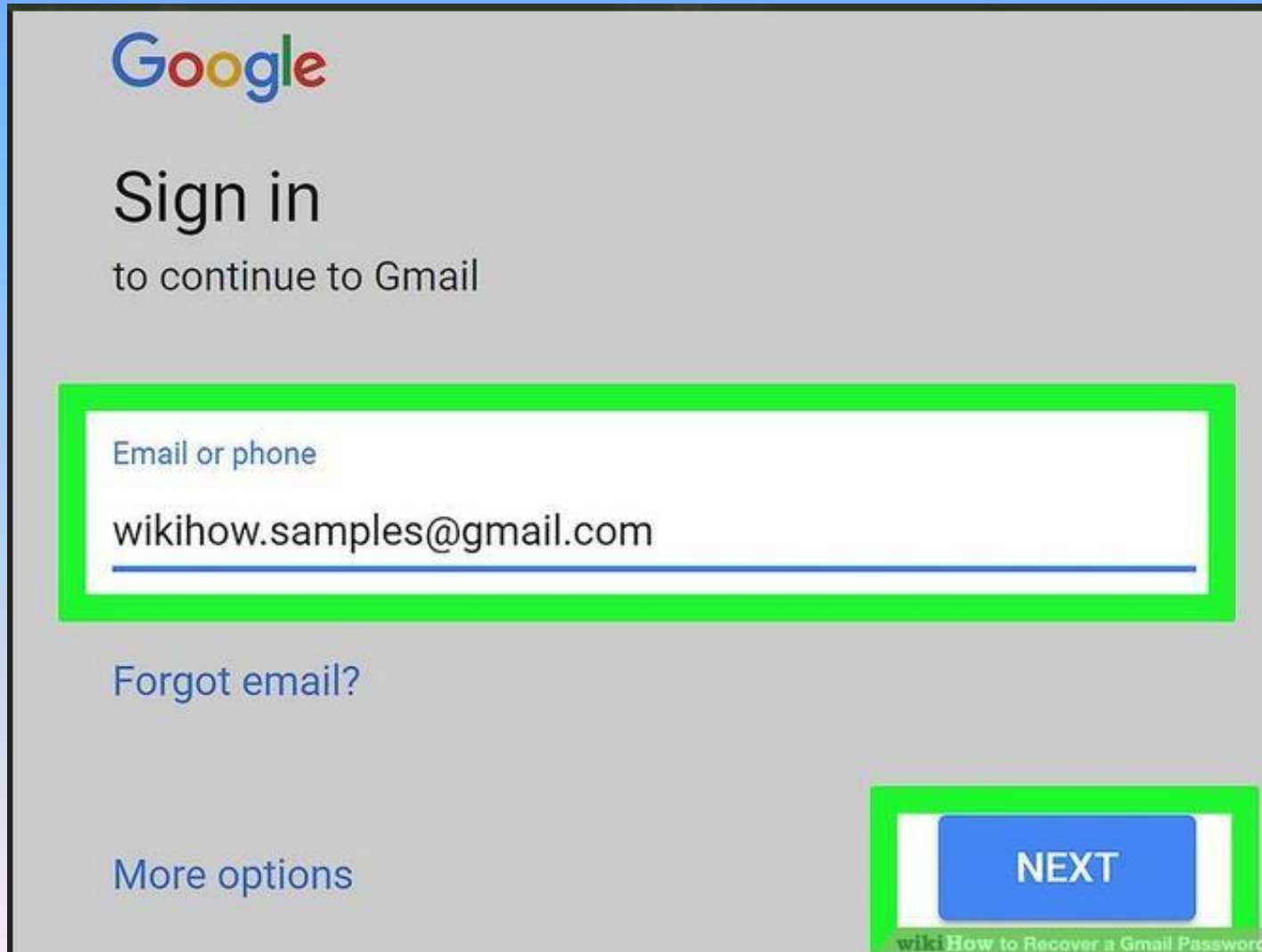
At the end of this job learner's will be able

To define the Recovery file.

To sign in E-mail.

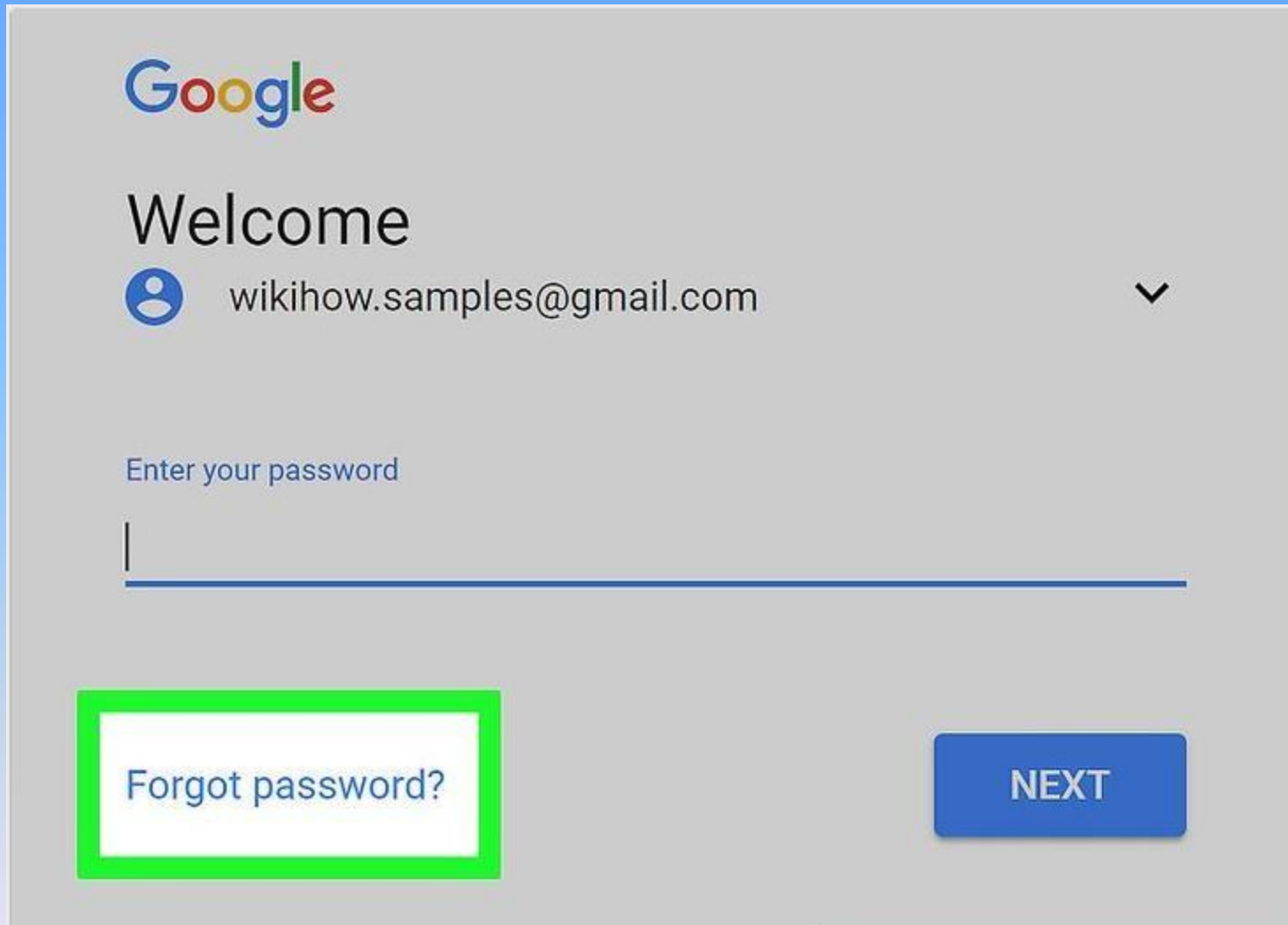
To change password or recovery password.

1 **Go to <https://mail.google.com>**. Use the link or type the URL in a web browser. If your email or phone number isn't filled in automatically, type it into the labeled field and click on Next.



The image shows a screenshot of the Gmail sign-in page. At the top left is the Google logo. Below it, the text "Sign in" is displayed in a large font, followed by "to continue to Gmail" in a smaller font. A white input field with a green border contains the text "Email or phone" and "wikihow.samples@gmail.com". Below the input field, there is a link for "Forgot email?". At the bottom left, there is a link for "More options". At the bottom right, there is a blue button with the text "NEXT" and a green border. At the very bottom right, there is a small watermark that reads "wikiHow to Recover a Gmail Password".

2 Click on Forgot password? below the password field.




The image shows a Google login interface. At the top left is the Google logo. Below it is the word "Welcome" in a large, dark font. Underneath "Welcome" is a user profile icon (a blue circle with a white person silhouette) followed by the email address "wikihow.samples@gmail.com" and a small downward-pointing chevron icon. Below the email address is a text input field with the placeholder text "Enter your password". The input field is empty, with a vertical cursor on the left and a horizontal blue underline below it. At the bottom left, there is a white rectangular button with a thick green border containing the text "Forgot password?". To the right of this button is a blue rectangular button with the text "NEXT" in white capital letters.

3 Enter the last password you remember and click on Next.

If you don't remember any of the passwords you've used before, click on Try a different question at the bottom of the gray box. Continue clicking on Try a different question until you come across one that you can answer, answer it, then click on Next.

Answer the following to verify this account is yours.



Enter the last password you remember

Next

Try a different question

4 Follow the on-screen instructions.

You'll be asked to do one of the following: Confirm a text to the phone number associated with your Gmail account;

Confirm a message to the email associated with your Gmail account;

Confirm the email of your recovery email account if you've set one up; or

Enter an email that you can check immediately.

Answer the following to verify this account is yours.



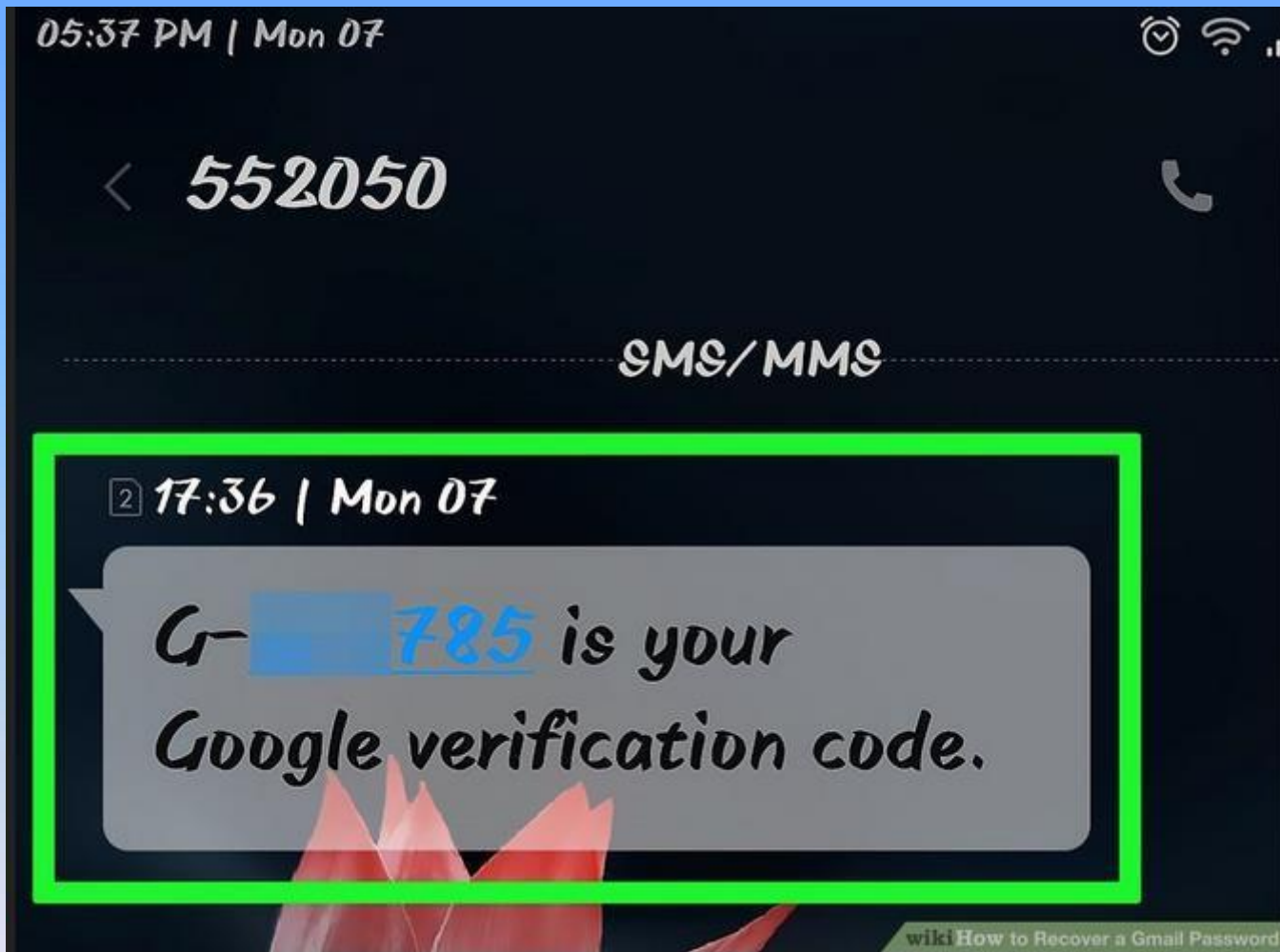
Get a verification code by text message
at: 06

Send text message

[Try a different question](#)


5

Open the applicable email or text message from Google.



6

Enter the verification code in the message in the field on the screen.



Enter a verification code

A text message with a verification code was just sent to [redacted] 06

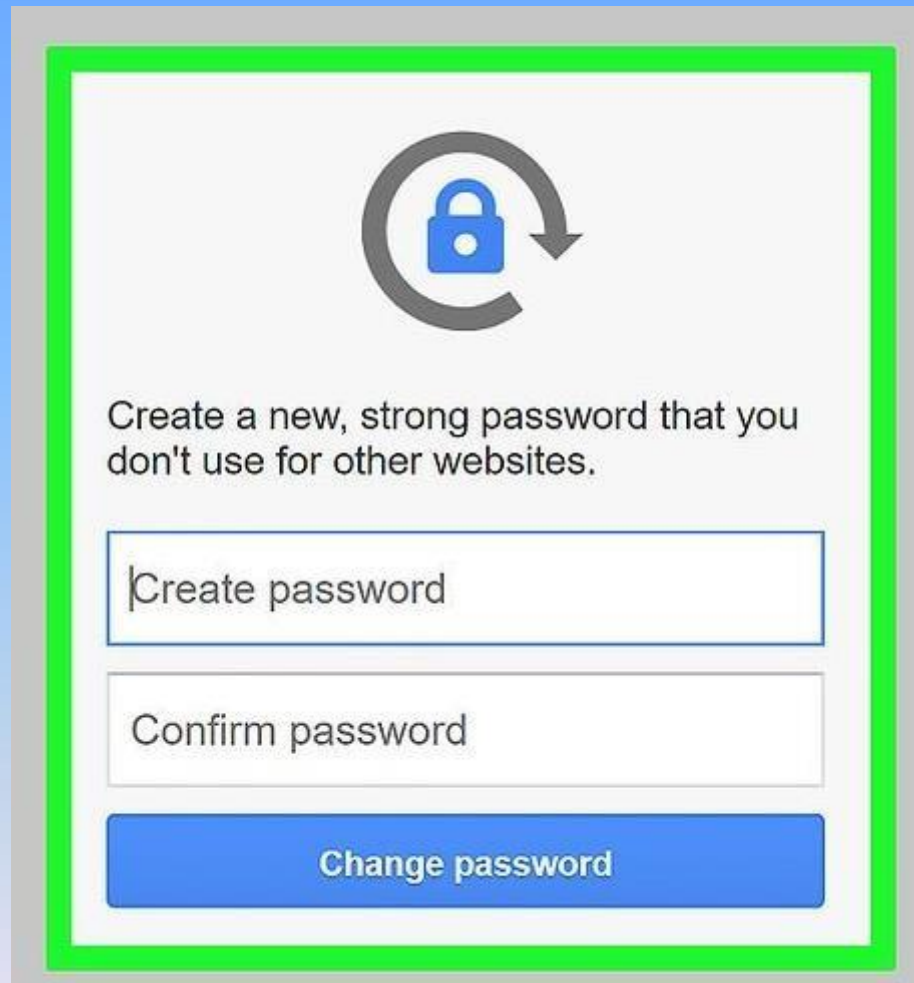
G- [redacted] 785

Next

[Try a different question](#)

7

Enter a new password and confirm it in the labeled fields.



The image shows a user interface for changing a password. At the top center is a circular icon containing a blue padlock and a grey arrow pointing clockwise. Below the icon is the text: "Create a new, strong password that you don't use for other websites." There are two input fields: the first is labeled "Create password" and the second is labeled "Confirm password". At the bottom is a blue button with the text "Change password". The entire form is enclosed in a thick green border.

Create a new, strong password that you don't use for other websites.

Create password

Confirm password

Change password

8. Click on Change password.



Create a new, strong password that you don't use for other websites.

screen#/image/Password - Gmail Password Step 9 Version 5.jpg

Question

- 1.What is E-mail?**
- 2.What is file recovery?**

Job no:03

Name of the job:

Apply Various Security Steps in E-mail

Learning outcome:

At the end of this job learner's will be able

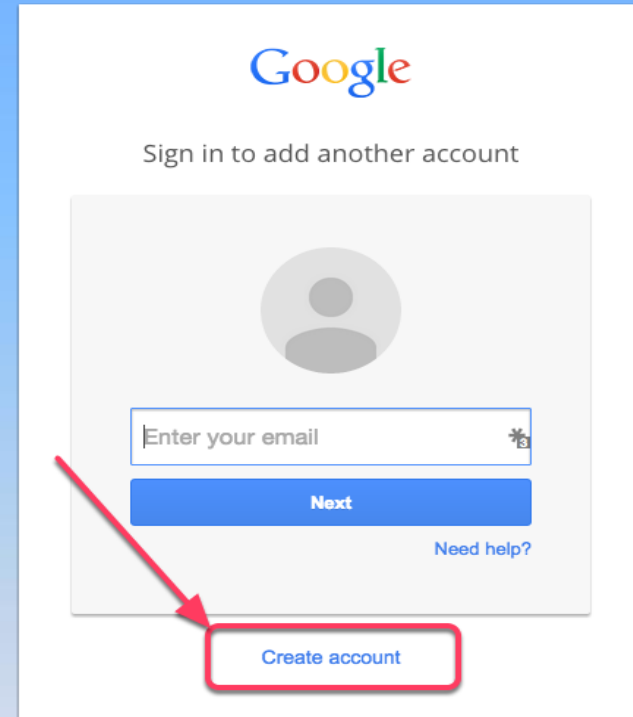
To define the E-mail.

To sign in E-mail.

To change Various Security Steps in E-mail

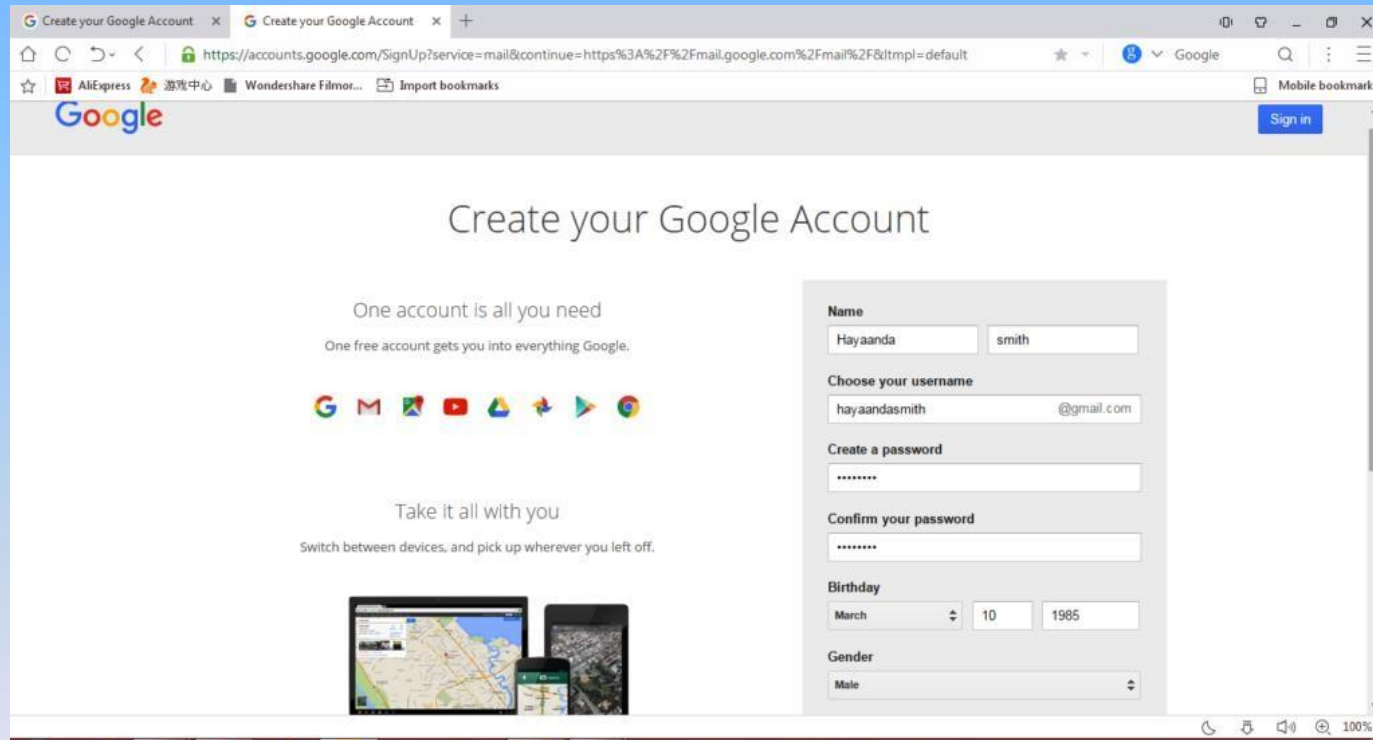
Create An E-mail Account

Step 1 : First we have to open a browser and then we will visit www.gmail.com .



Step 2: Enter all the required information in the "Create an Account" online form:

We now need to start filling the form. Once we have entered first and last names, it is time to choose a login name. This is important as login name will decide the email address will get, and in case of a Gmail account.



The screenshot shows a web browser window with the URL <https://accounts.google.com/SignUp?service=mail&continue=https%3A%2F%2Fmail.google.com%2Fmail%2F&itpl=default>. The page title is "Create your Google Account". The main heading is "Create your Google Account". Below the heading, it says "One account is all you need" and "One free account gets you into everything Google." There are icons for Google, Gmail, Drive, YouTube, Photos, Maps, and Play Store. Below that, it says "Take it all with you" and "Switch between devices, and pick up wherever you left off." There is an image of a laptop, a smartphone, and a tablet. On the right side, there is a form with the following fields:

- Name**: First name "Hayaanda", Last name "smith".
- Choose your username**: "hayaandasmith@gmail.com".
- Create a password**: "*****".
- Confirm your password**: "*****".
- Birthday**: Month "March", Day "10", Year "1985".
- Gender**: "Male".

Step 3 : After Step Two, privacy and terms we have to accept the agreement.

www.allindiaroundup.com

Privacy and Terms

By choosing "I agree" below you agree to Google's [Terms of Service](#).

You also agree to our [Privacy Policy](#), which describes how we process your information, including these key points:

Data we process when you use Google

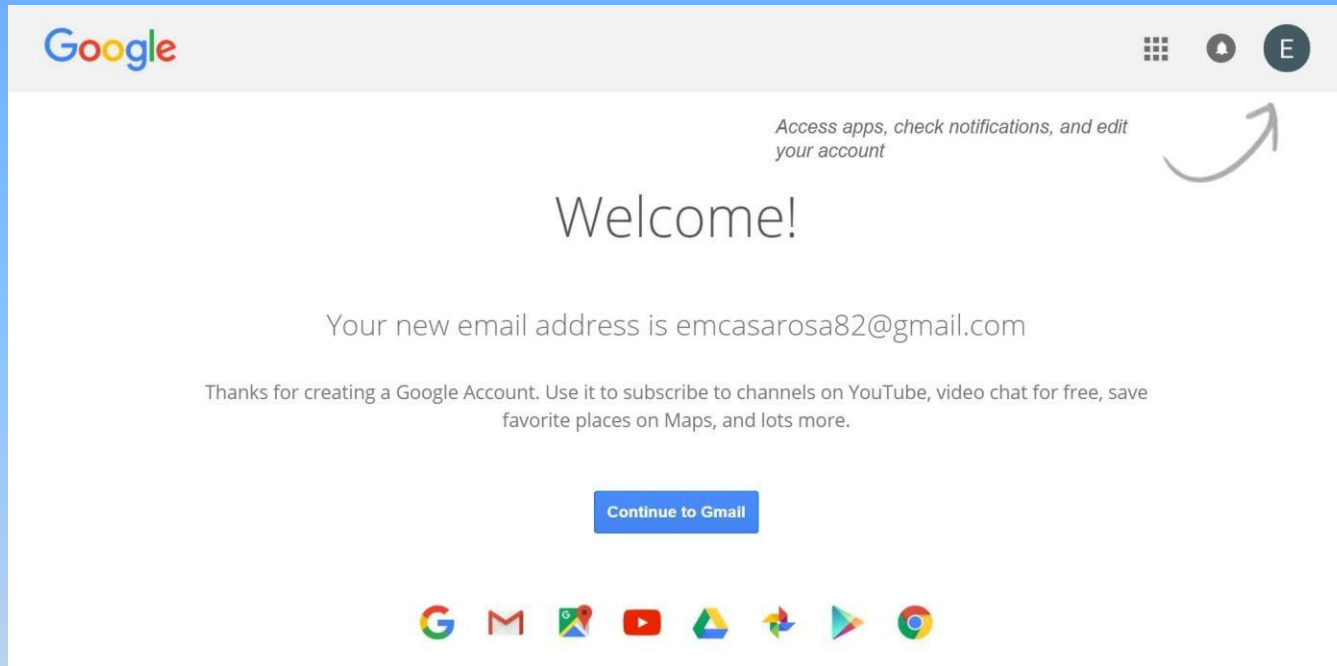
- When you use Google services to do things like write a message in Gmail or comment on a YouTube video, we store the information you create.
- When you search for a restaurant on Google Maps or watch a video on YouTube, for example, we process information about that activity.

CANCEL **I AGREE**

Step 4 :A verification code will be sent to your phone and you have to verify you phone number for your Google account .

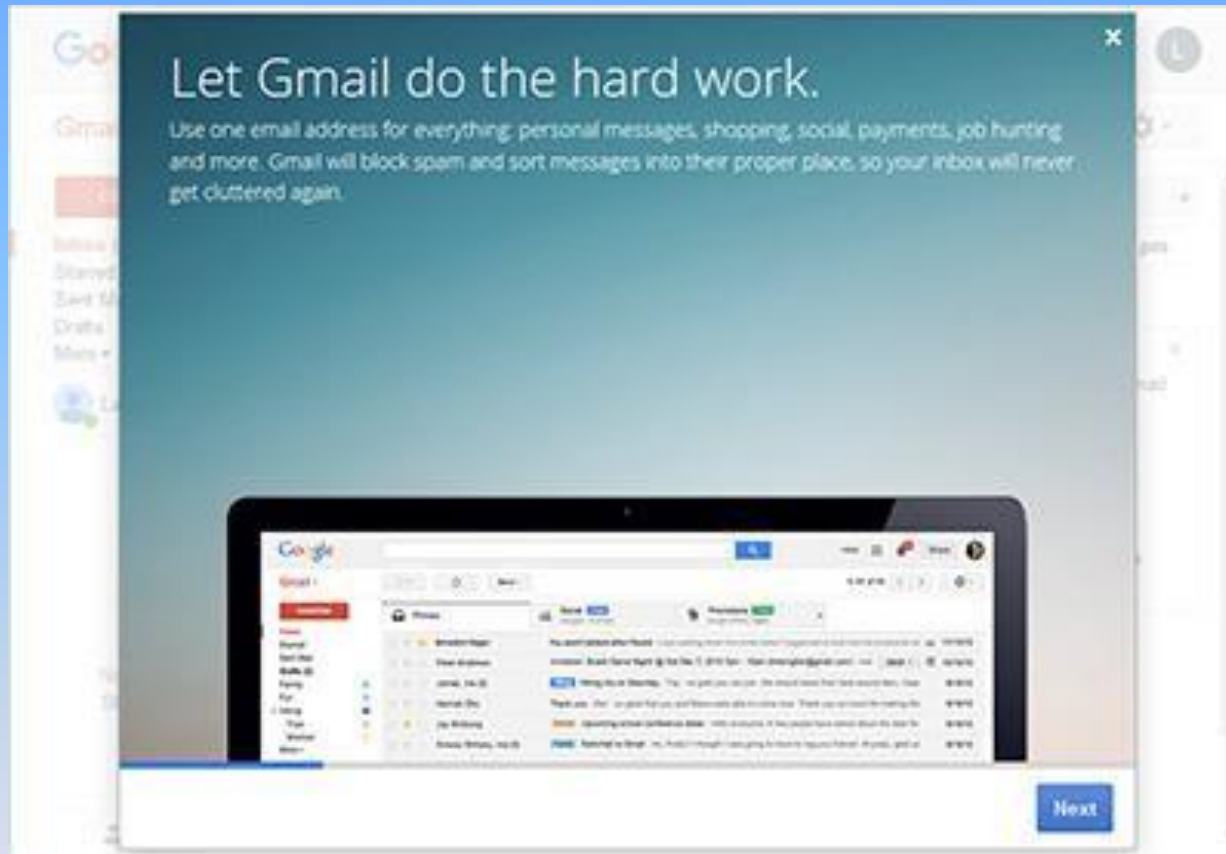


Step 5 : After verifying our Phone number, we will press the continue to Gmail .



Step 6 : Now we have to press the next button.

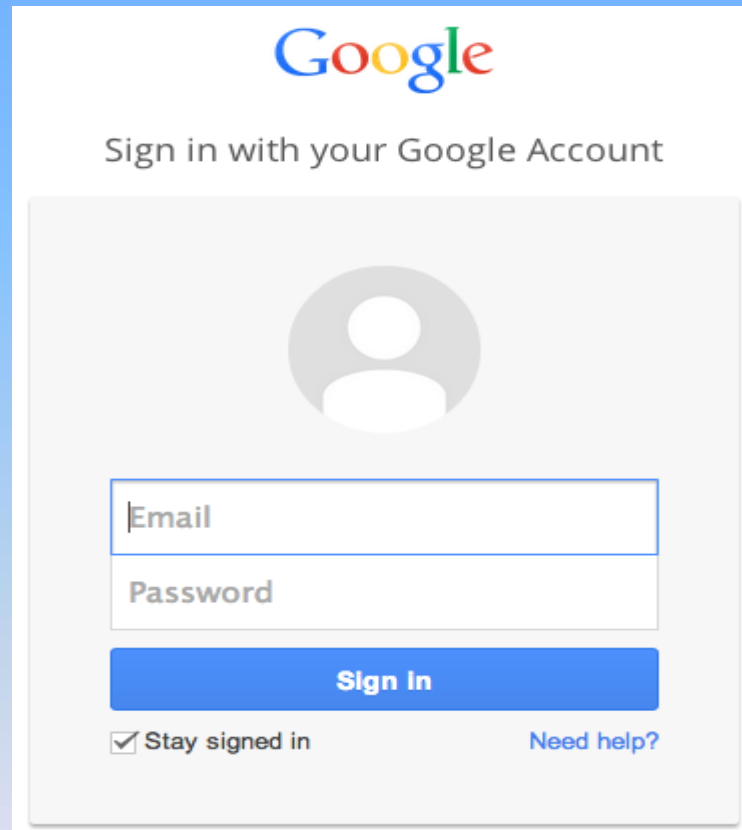
By this way we can create a gmail acoount and now we have to login



We have to log in to the gmail account and we will also know the all functions of a gmail .



We have to insert our email and password in the form and then we have to click on the sign in . If we don't give the right email address and password the email won't be logged . So Everyone must be careful when they enter their email account and password.



The image shows the Google sign-in interface. At the top is the Google logo. Below it is the text "Sign in with your Google Account". In the center is a large, light gray circular icon representing a person's profile. Below the icon are two input fields: the first is labeled "Email" and the second is labeled "Password". Below these fields is a blue button with the text "Sign In". At the bottom left is a checkbox labeled "Stay signed in" which is checked. At the bottom right is a blue link labeled "Need help?".

We will see some options just like above and these options are: Inbox, Starred, Snoozed, Sent, Drafts and More. Now let's see the description of these options/functions.

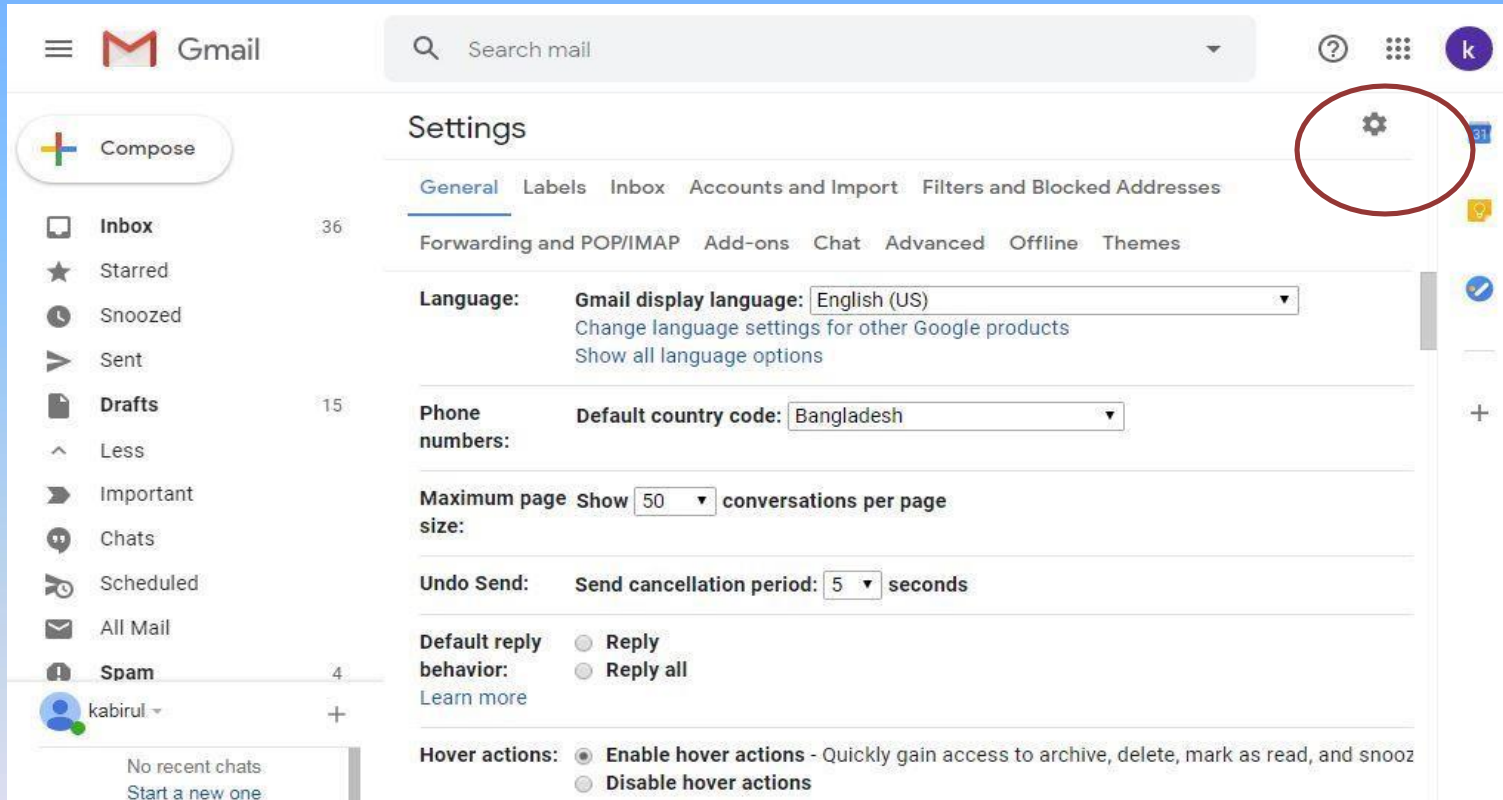
The screenshot displays the Gmail interface. On the left sidebar, the navigation options are: Compose, Inbox (with a red notification bubble containing the number 2), Starred, Snoozed, Sent, Drafts (with a notification bubble containing the number 26), and More. The main content area shows a search bar at the top, followed by a list of email categories: 'Important and unread' (1-2 of 2), 'Starred' (1-4 of 4), and 'Everything else' (1-25 of 2,331). The 'Starred' category is currently selected and expanded, showing a list of four starred emails:

Category	Count
Important and unread	1-2 of 2
Starred	1-4 of 4
Everything else	1-25 of 2,331

Category	Count
Starred	1-4 of 4
Starred	1-4 of 4
Starred	1-4 of 4
Starred	1-4 of 4

Category	Count
Starred	1-4 of 4
Starred	1-4 of 4
Starred	1-4 of 4
Starred	1-4 of 4

First we have to open a browser and we have to login into the gmail account and then we will see a setting icon on the top left corner. Then we will click on that icon and the setting panel will come we can change the setting of the g-mail form here.



The screenshot displays the Gmail interface with the Settings panel open. The settings icon (gear) in the top right corner is circled in red. The page shows various settings categories like General, Labels, and Inbox, with the General tab selected. Settings include language (English (US)), phone numbers (Bangladesh), maximum page size (50), undo send (5 seconds), and hover actions (Enable hover actions).

Settings

General | Labels | Inbox | Accounts and Import | Filters and Blocked Addresses | Forwarding and POP/IMAP | Add-ons | Chat | Advanced | Offline | Themes

Language: Gmail display language: English (US)
Change language settings for other Google products
Show all language options

Phone numbers: Default country code: Bangladesh

Maximum page size: Show 50 conversations per page

Undo Send: Send cancellation period: 5 seconds

Default reply behavior: Reply | Reply all
Learn more

Hover actions: Enable hover actions - Quickly gain access to archive, delete, mark as read, and snooze | Disable hover actions

Question

- 1.What is E-mail setting?**
- 2.What is g-mail?**

Job no:04

Name of the job:

Apply various security steps in social media such as facebook login.

Learning outcome

At the end of this job learner's will be able

To define the security.

To login in Facebook.

Facebook security

Open Facebook Account : Write down link of address bar.

http://www.facebook.com

Facebook Log In

The image shows a screenshot of the Facebook website's login and sign-up interface. At the top, there is a navigation bar with the Facebook logo on the left and login fields on the right. The login fields include 'Email or Phone' and 'Password', with a 'Log In' button to the right. Below the login fields is a link for 'Forgotten account?'. The main content area is split into two sections. On the left, there is a promotional message: 'Facebook helps you connect and share with the people in your life.' Below this text is a graphic showing several orange person icons connected by dashed lines, representing a social network. On the right, there is a 'Create an account' section. It starts with the text 'It's quick and easy.' followed by several input fields: 'First name', 'Surname', 'Mobile number or email address', and 'New password'. Below these is a 'Birthday' section with three dropdown menus for day (17), month (Sept), and year (1994). There is also a 'Gender' section with radio buttons for 'Female', 'Male', and 'Custom'. A green 'Sign Up' button is positioned below the form. At the bottom of the sign-up section, there is a small disclaimer: 'By clicking Sign Up, you agree to our Terms, Data Policy and Cookie Policy. You may receive SMS notifications from us and can opt out at any time.' Below the sign-up section, there is a link: 'Create a Page for a celebrity, band or business.' At the very bottom of the page, there is a language selection bar with options like 'English (UK)', 'বাংলা', 'असमिया', 'हिन्दी', 'नेपाली', 'Bahasa Indonesia', 'العربية', '中文(简体)', 'Bahasa Melayu', 'Español', 'Português (Brasil)', and a plus sign for more languages. Below the language bar is a footer with various links: 'Sign Up', 'Log In', 'Messenger', 'Facebook Life', 'People', 'Pages', 'Page categories', 'Places', 'Games', 'Locations', 'Marketplace', 'Groups', 'Instagram', 'Local Fundraisers', 'Services', 'About', 'Create ad', 'Create Page', 'Developers', 'Careers', 'Privacy', 'Cookies', 'AdChoices', 'Terms', 'Account security', 'Login help', and 'Help'. The footer also includes the text 'Facebook © 2019'.

Facebook – log in or sign u X +

www.facebook.com

Getting Started

facebook

Email or Phone Password Log In

Forgotten account?

Facebook helps you connect and share with the people in your life.

Create an account

It's quick and easy.

First name Surname

Mobile number or email address

New password

Birthday 17 Sept 1994

Gender Female Male Custom

By clicking Sign Up, you agree to our Terms, Data Policy and Cookie Policy. You may receive SMS notifications from us and can opt out at any time.

Sign Up

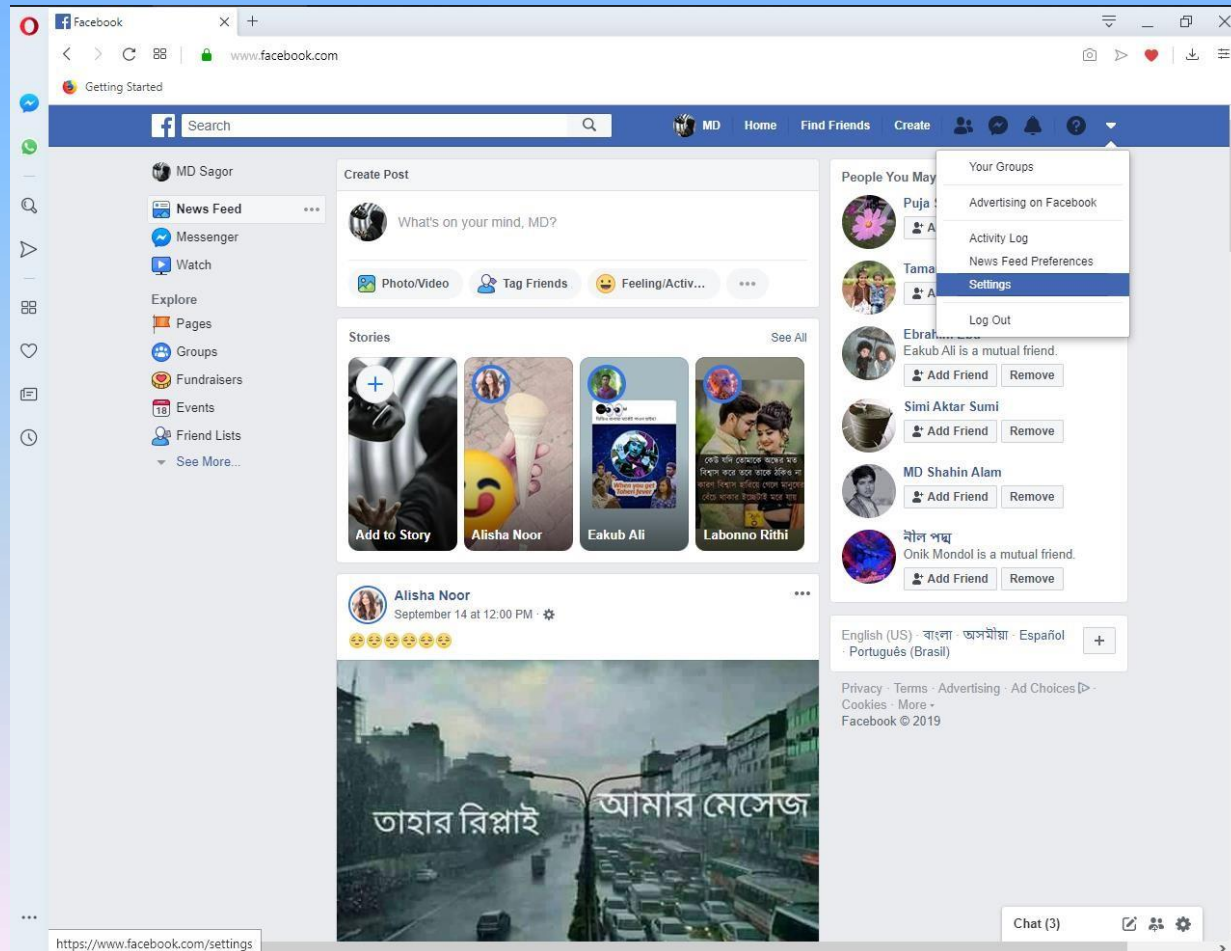
Create a Page for a celebrity, band or business.

English (UK) বাংলা असमिया हिन्दी नेपाली Bahasa Indonesia العربية 中文(简体) Bahasa Melayu Español Português (Brasil) +

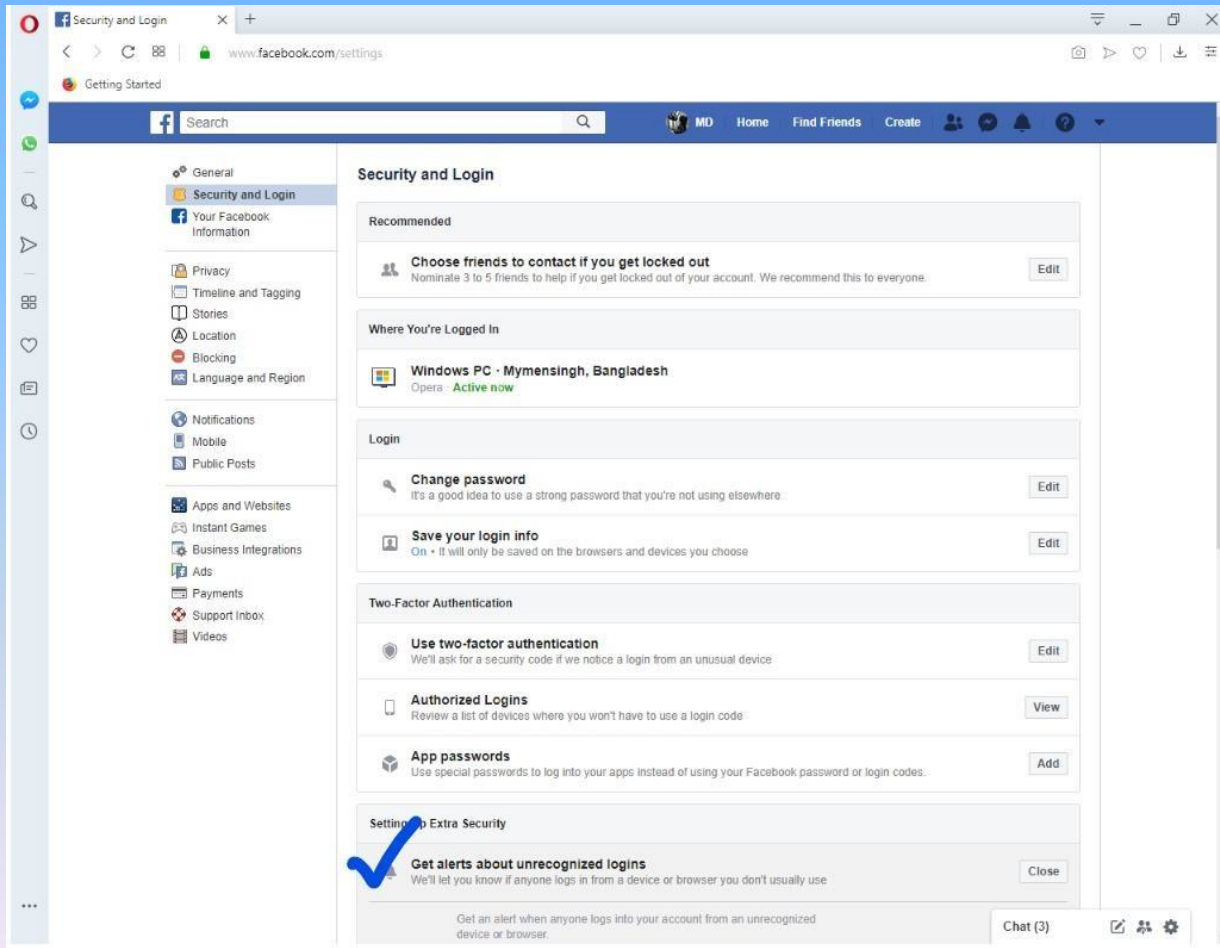
Sign Up Log In Messenger Facebook Life People Pages Page categories Places Games Locations Marketplace Groups Instagram Local Fundraisers Services About Create ad Create Page Developers Careers Privacy Cookies AdChoices Terms Account security Login help Help

Facebook © 2019

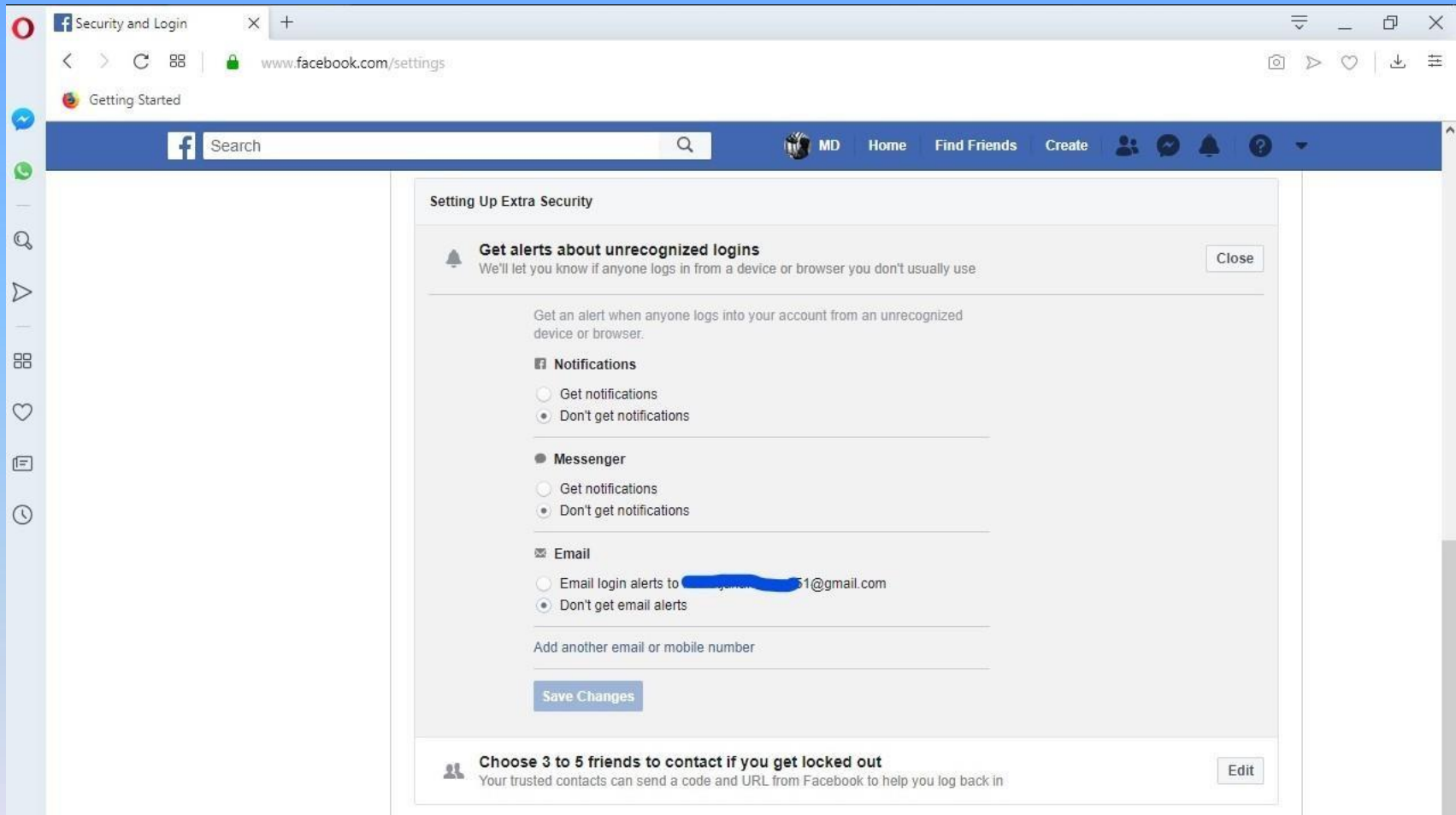
Go to its setting:
Click on setting option. After that we will see the below window.



(3) Apply various security steps such as mobile number and e-mail address: After click on setting we get this interface Then click “Get alerts about unrecognized logins”



Security “Get alerts about unrecognized logins”



The screenshot shows a web browser window with the Facebook Security and Login settings page. The browser's address bar shows the URL www.facebook.com/settings. The page title is "Security and Login". The main content area is titled "Setting Up Extra Security".

Get alerts about unrecognized logins Close

We'll let you know if anyone logs in from a device or browser you don't usually use.

Get an alert when anyone logs into your account from an unrecognized device or browser.

Notifications

- Get notifications
- Don't get notifications

Messenger

- Get notifications
- Don't get notifications

Email

- Email login alerts to [redacted]@gmail.com
- Don't get email alerts

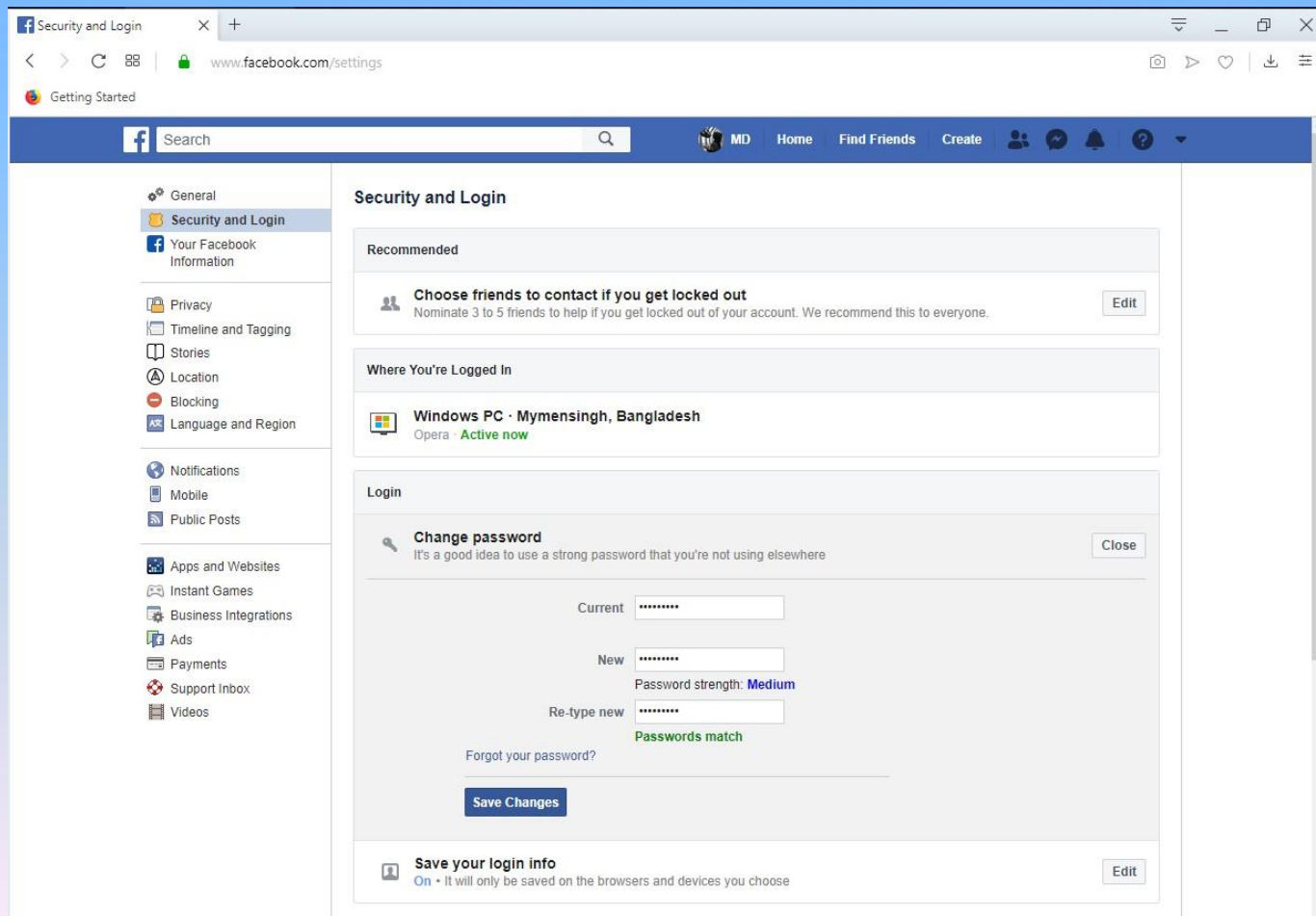
Add another email or mobile number

[Save Changes](#)

Choose 3 to 5 friends to contact if you get locked out Edit

Your trusted contacts can send a code and URL from Facebook to help you log back in

Try to change Facebook password by applying those security steps: “Security and Login” then Password change.



Question

- 1.What is social media?**
- 2.What is facebook?**

Job no:04

Name of the job:

Install Antivirus Software and scan Computer System With the Software.

Learning outcome

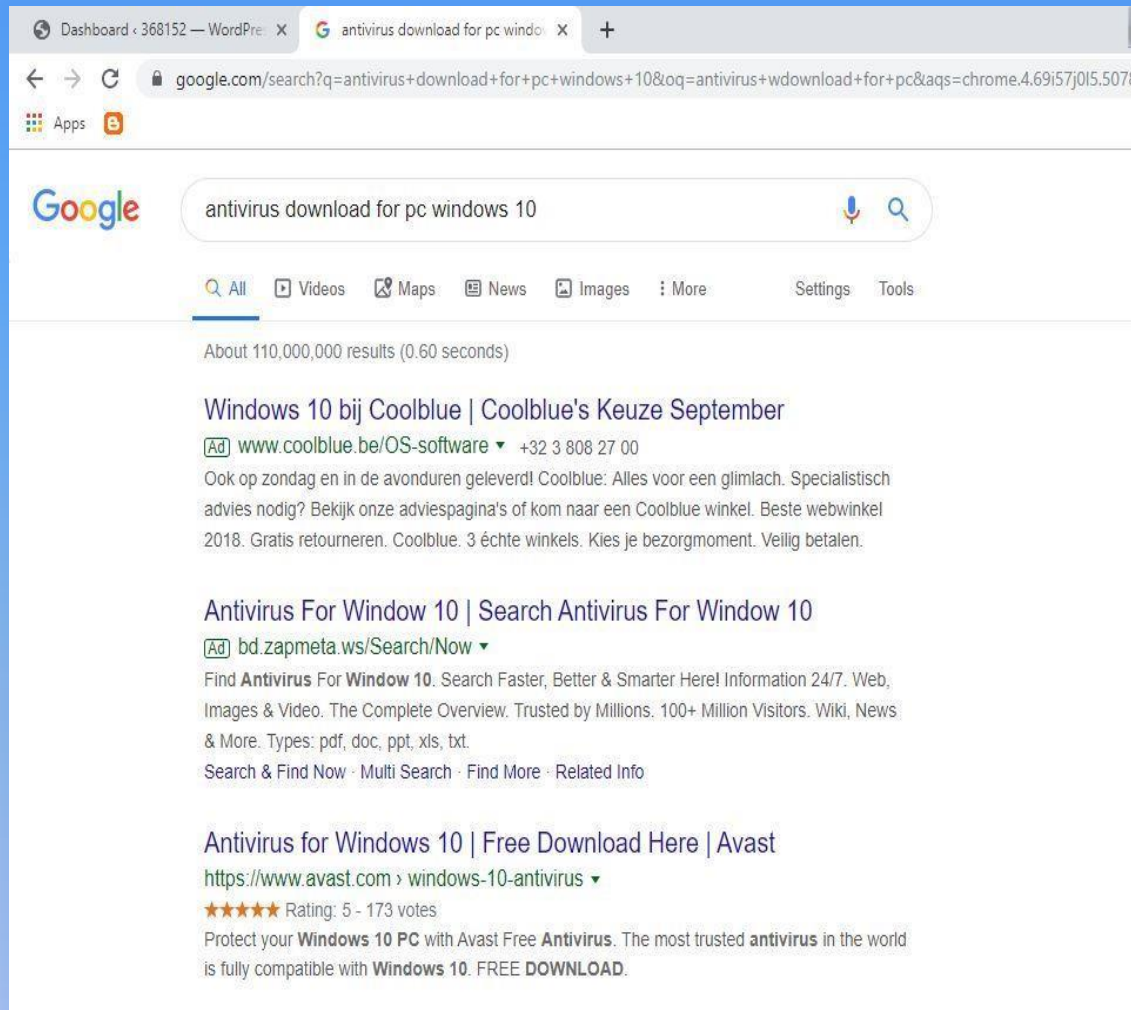
At the end of this job learner's will be able

To define the Antivirus Software

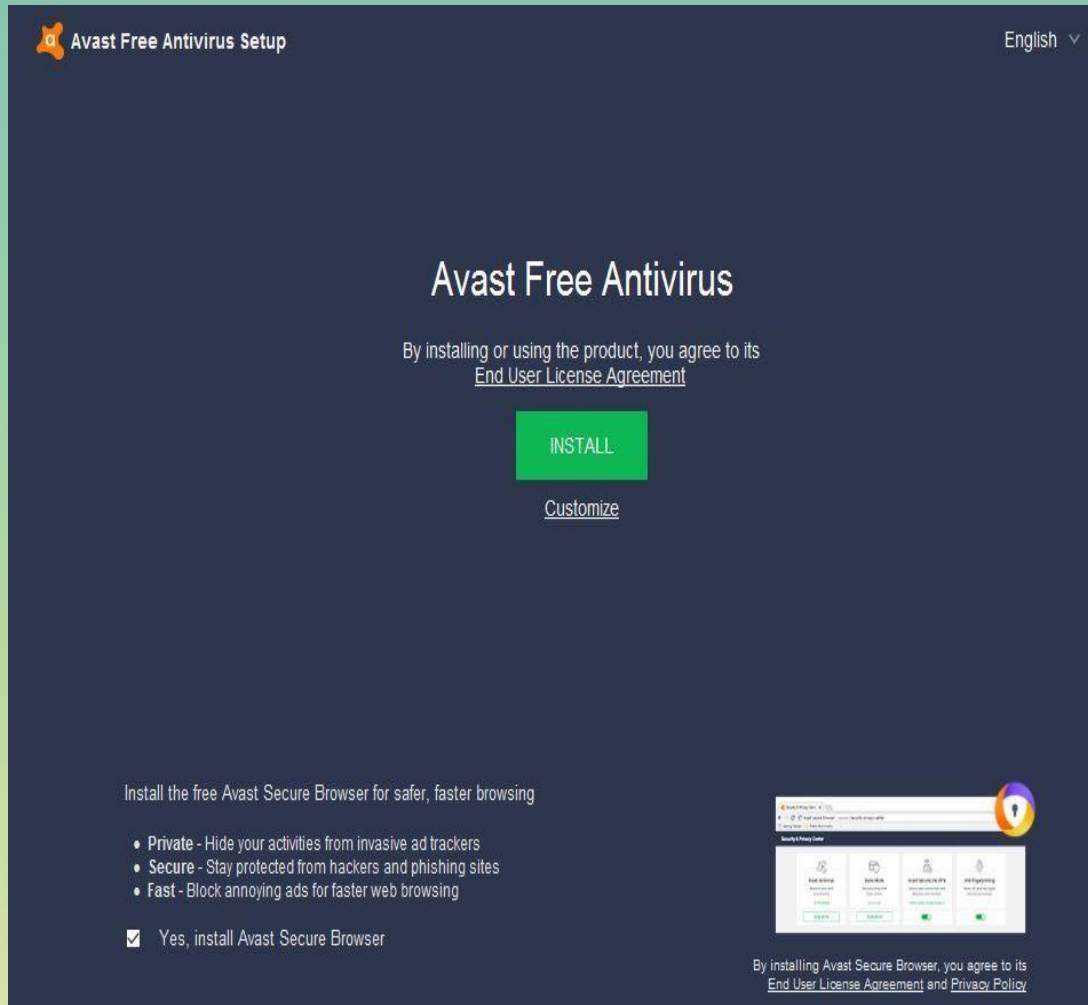
To check error.

To scan Computer System With the Software..

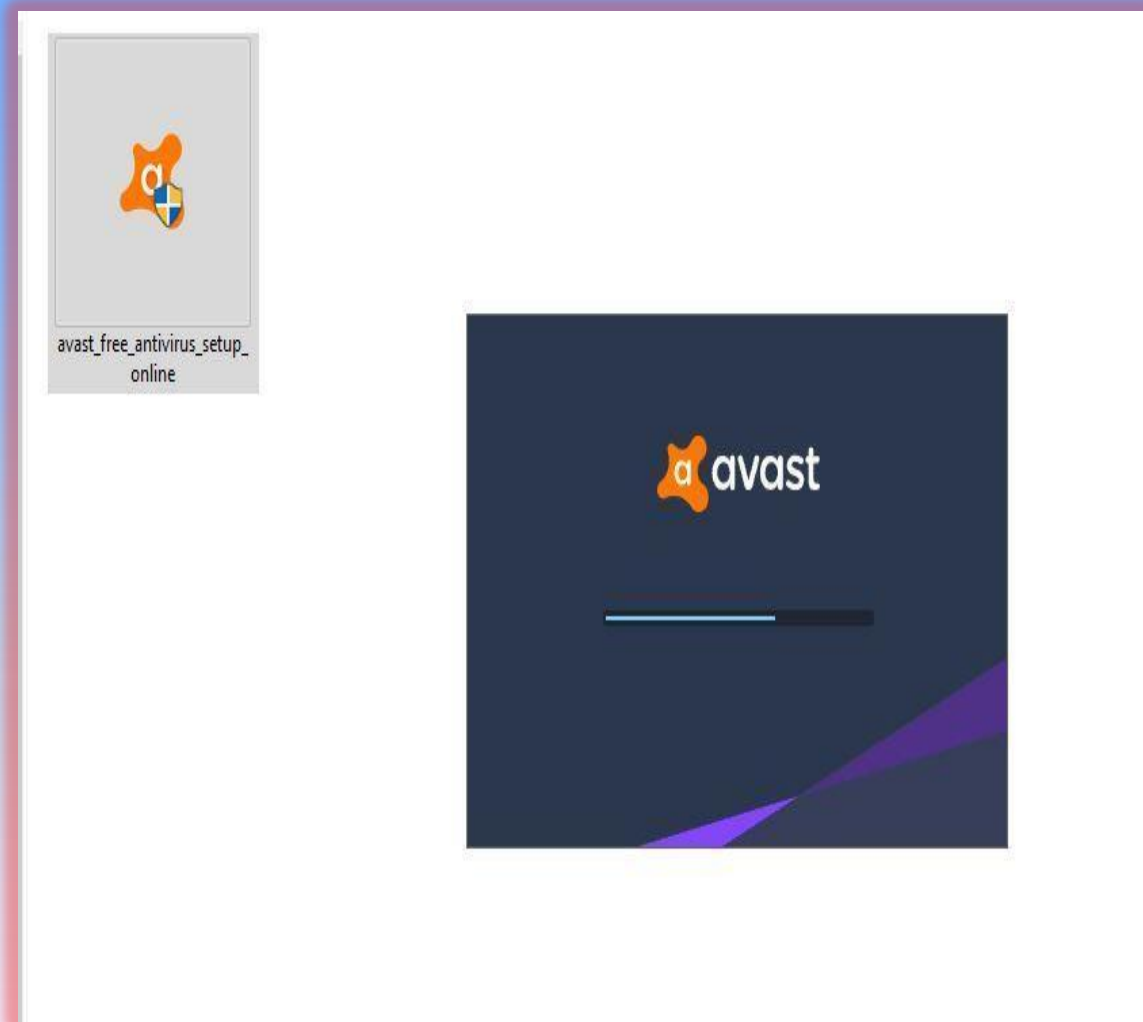
At first Open Computer then free download antivirus software .



**Install the Antivirus software-
Download and step by step install.At first click on
Install. Then click on Next>Next>Finish.**



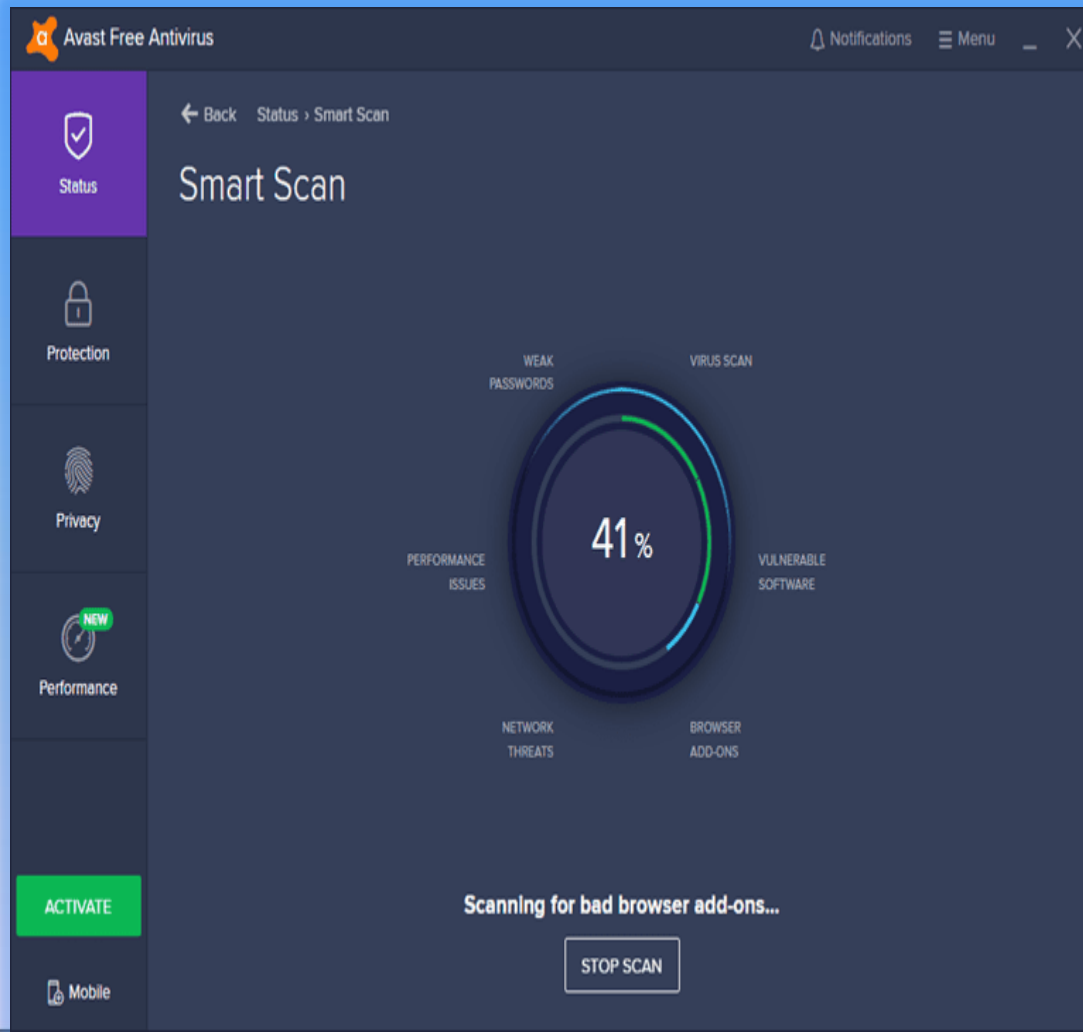
When Installation process is running, this window show below.



After complete the installation we will see the below window.



Then open Software
Click on Start Quick Scan .Automatic start to Scan .



Question

- 1.What is Antivirus Software ?**
- 2.How many types of antivirus?**

Job no:06

Name of the job:

Install firewall to a computer system and prevent the computer system form Intruder.

Learning outcome

At the end of this job learner's will be able

To define Firewall

To check error.

To scan Computer System With the Software..

Click on Control Panel >System and security> Windows Firewall.

Control Panel Home

Allow an app or feature through Windows Firewall

- Change notification settings
- Turn Windows Firewall on or off
- Restore defaults
- Advanced settings

Troubleshoot my network

Help protect your PC with Windows Firewall

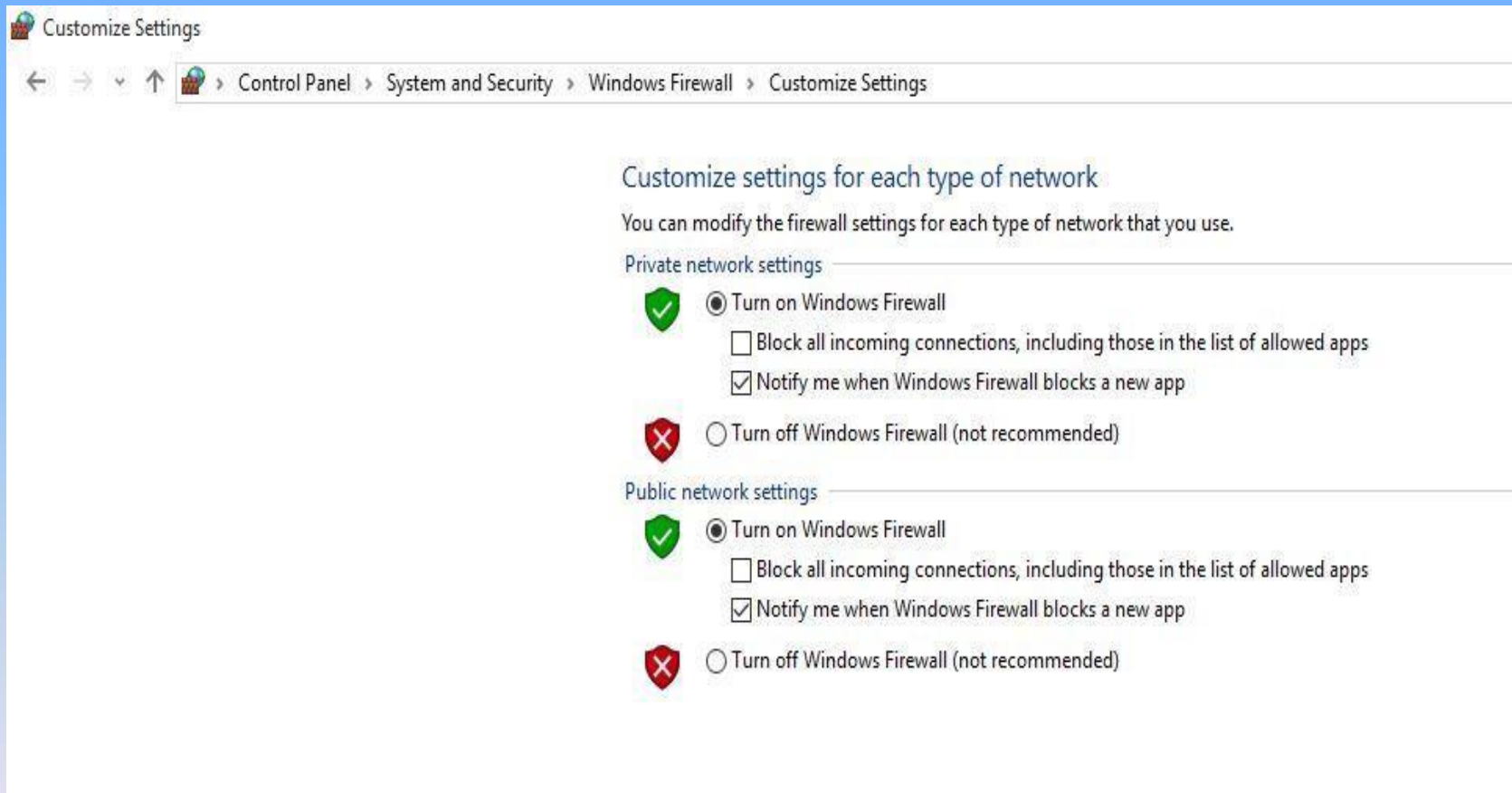
Windows Firewall can help prevent hackers or malicious software from gaining access to your PC through the Internet or a network.

	Private networks	Not connected
	Guest or public networks	Connected

Networks in public places such as airports or coffee shops

Windows Firewall state:	On
Incoming connections:	Block all connections to apps that are not on the list of allowed apps
Active public networks:	None
Notification state:	Notify me when Windows Firewall blocks a new app

Customize settings



The screenshot shows the Windows Firewall Customize Settings window. The title bar reads "Customize Settings". The breadcrumb navigation path is "Control Panel > System and Security > Windows Firewall > Customize Settings".

Customize settings for each type of network

You can modify the firewall settings for each type of network that you use.

Private network settings

- Turn on Windows Firewall
 - Block all incoming connections, including those in the list of allowed apps
 - Notify me when Windows Firewall blocks a new app
- Turn off Windows Firewall (not recommended)

Public network settings

- Turn on Windows Firewall
 - Block all incoming connections, including those in the list of allowed apps
 - Notify me when Windows Firewall blocks a new app
- Turn off Windows Firewall (not recommended)

Question

1. What is security?
2. What is Firewall?

Job no:07

Name of the job:

Use a hashing program to verify the integrity of data with HashCalc program.

Learning outcome

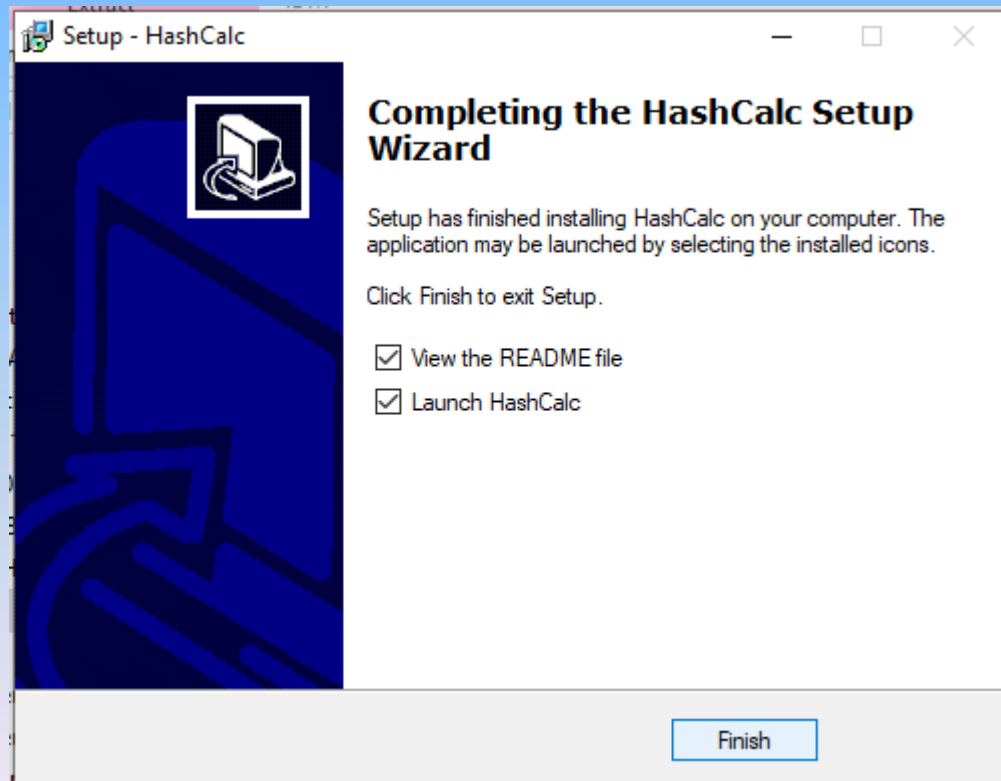
At the end of this job learner's must be able


To use HashCalc Program.

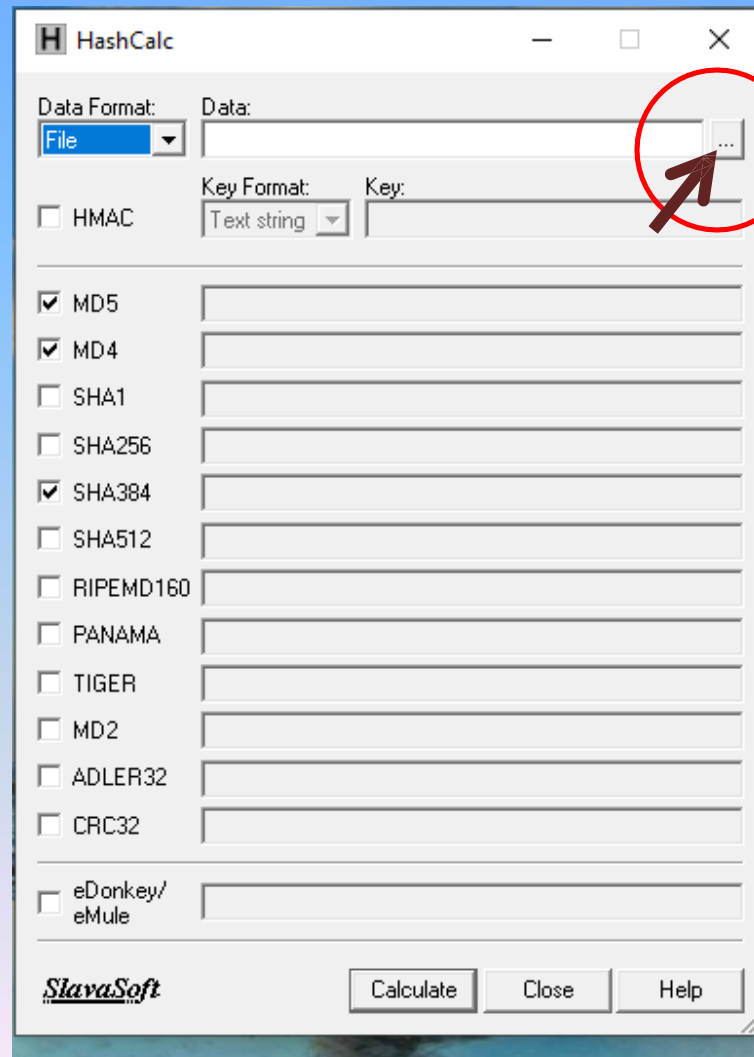
To define data integrity.

At first Open Computer then free download Hashcalc software .

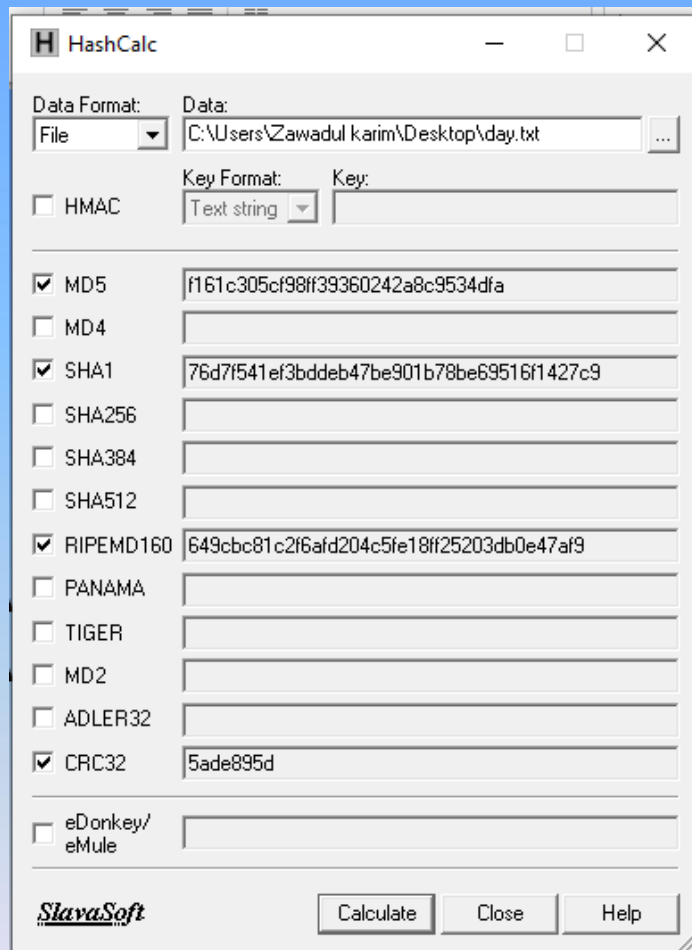
Then install HashCalc software.



Open Hashcalc program. Click on  for file select then click Calculate.



We see the calculating value after select the file.



Question

1. What is data integrity?
2. What is HashCalc?

Job no:08

Name of the job:

**Practice to sending Confidential information
over E-mail utilizing WinZip**

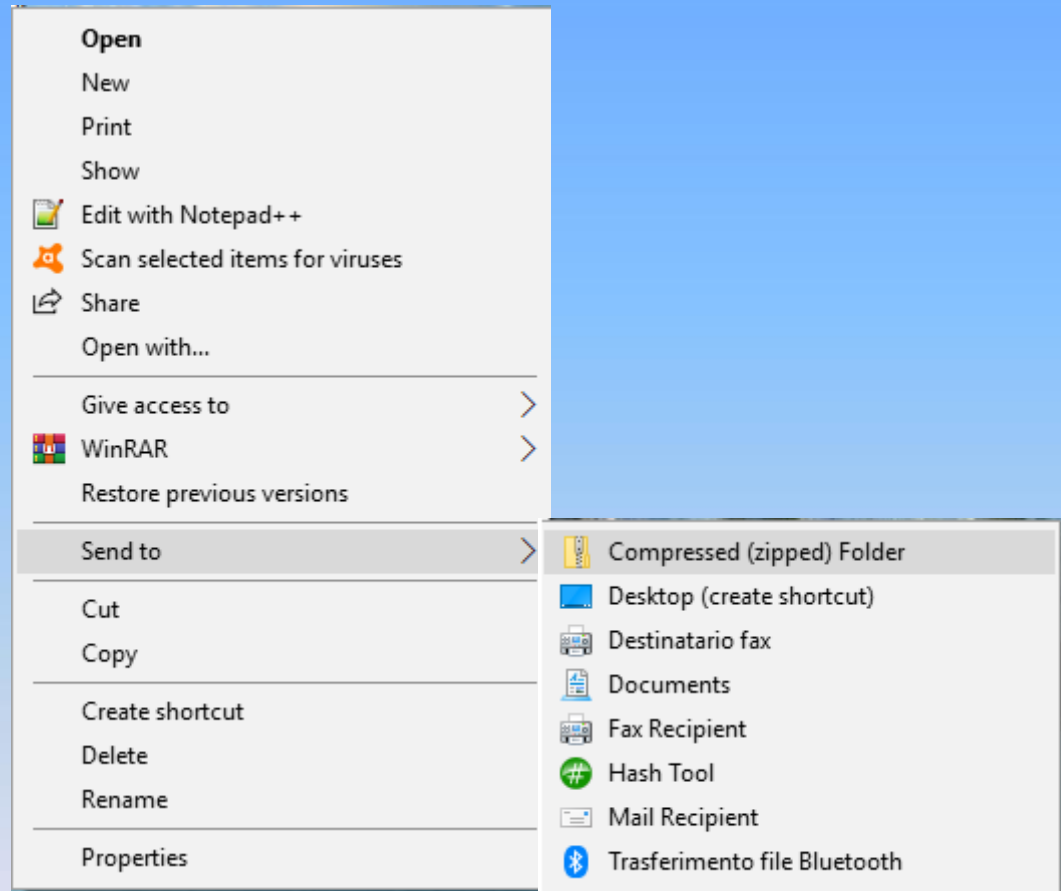
Learning outcome

At the end of this job learner's must be able

To create WinZip file.

To send E-mail with Confidential information .

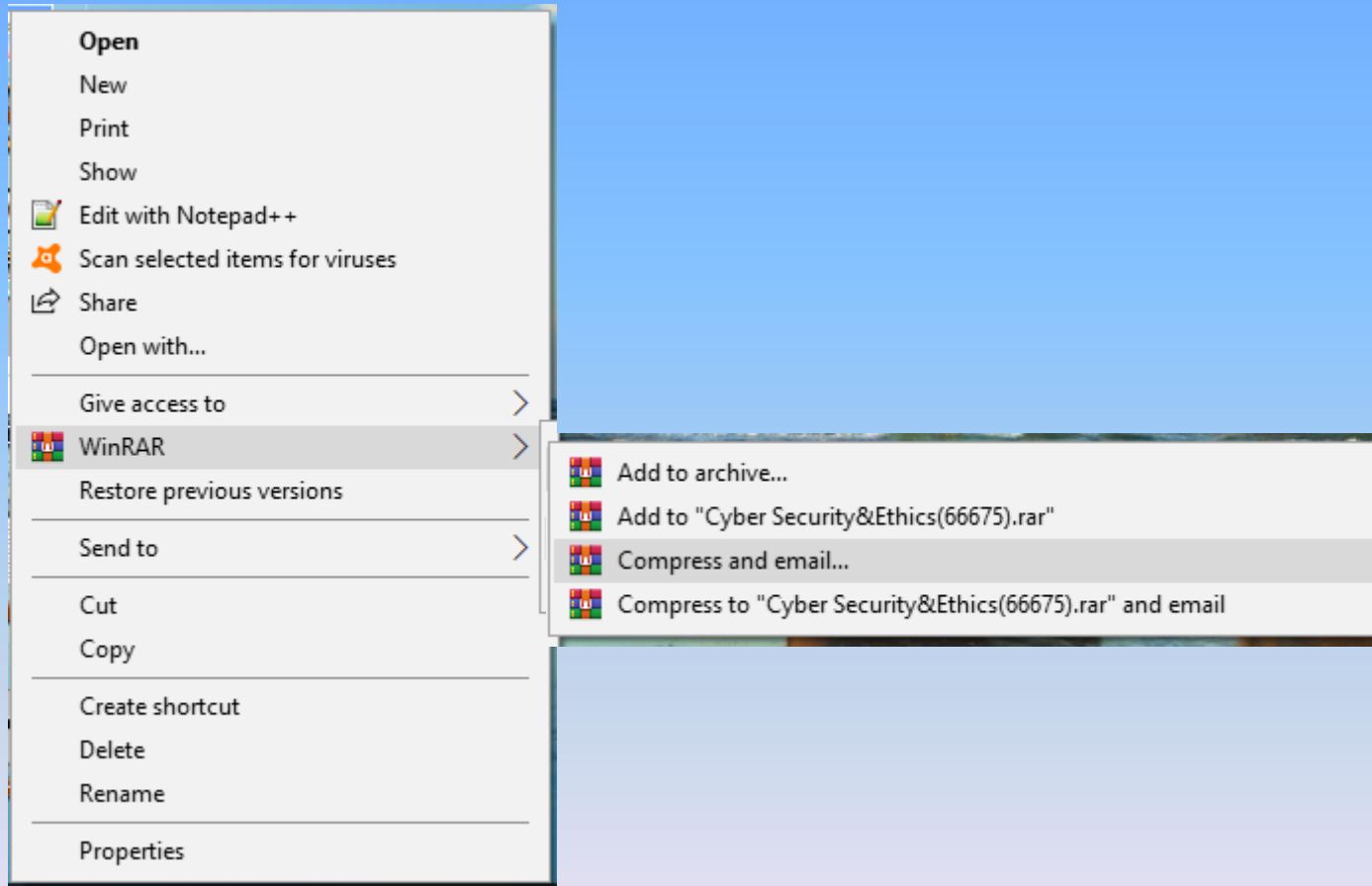
At first select the file. Click on mouse right button .Click on Compressed(Zipped) Folder.



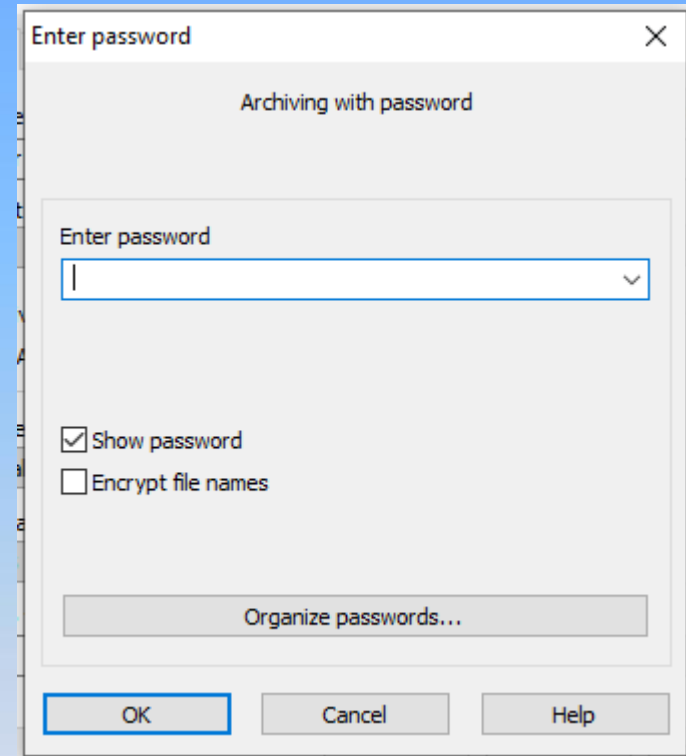
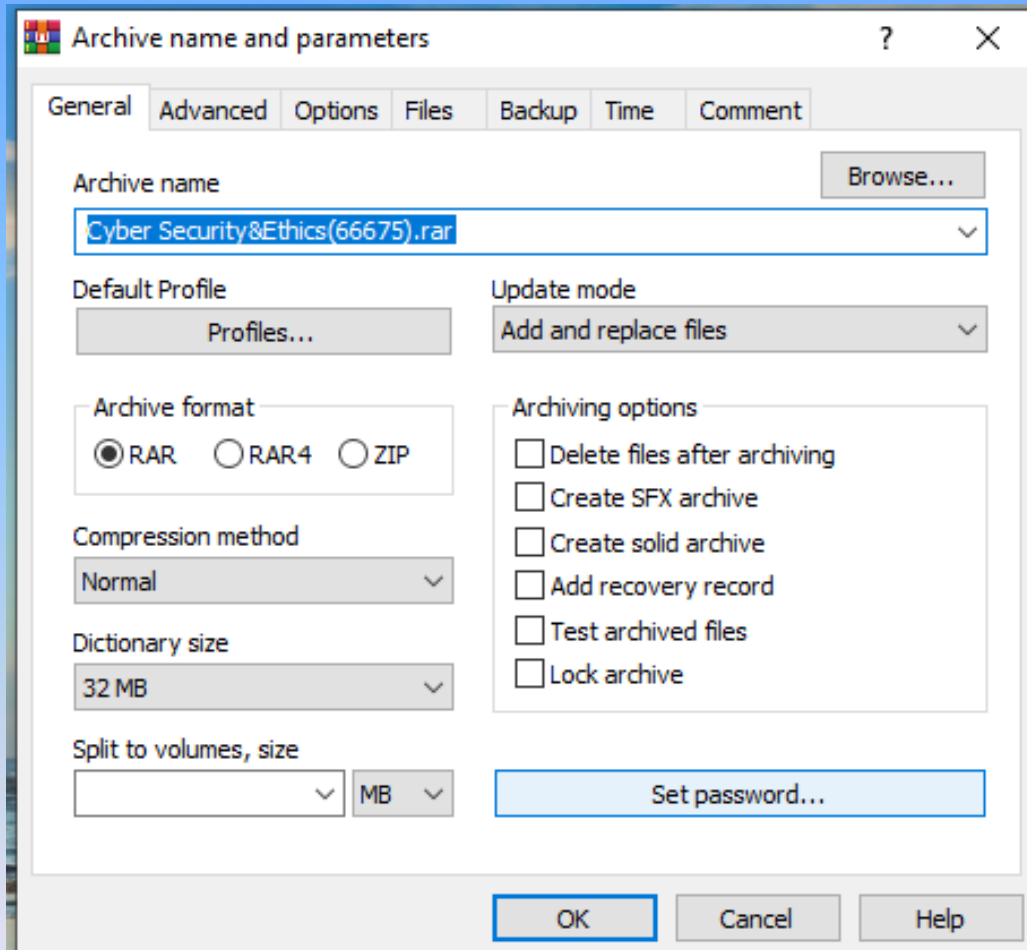
Zip File and UnZip file



Another Way to Zip File



Click on Set Password and Enter password. Then click OK again OK.



Question

1. What is WinZip file?
2. Why we use it?
3. Advantage of WinZip file.

