

Lab 01: Components of computers, Windows Basics, Use of Moellim, Use of email,

Objective(s):

To get familiar with the historical background and Different components of Computers.
To know how to use the email.
Getting used to Graphical User Interface in Windows Operating Systems.

Getting Familiar with computer

Task 1.1: What is Computer?

A computer is an electronic device, operating under the control of instructions stored in its own memory that can accept data (input), process the data according to specified rules, produce information (output), and store the information for future use.

Task 1.2: Computer Components

Any kind of computers consists of HARDWARE AND SOFTWARE.

1.2.1 Hardware:

Computer hardware is the collection of physical elements that constitutes a computer system. Computer hardware refers to the physical parts or components of a computer such as the monitor, mouse, keyboard, computer data storage, hard drive disk (HDD), system unit (graphic cards, sound cards, memory, motherboard and chips), etc. all of which are physical objects that can be touched.

1.2.2 Input Devices:

Input device is any peripheral (piece of computer hardware equipment to provide data and control signals to an information processing system such as a computer or other information appliance.

Input device Translate data from those humans understand to one that the computer can work with. Most common are keyboard and mouse

Example of Input Devices:-

1. Keyboard
2. Mouse (pointing device)
3. Microphone
4. Touch screen
5. Scanner
6. Cameras
7. Pen Input
8. Barcode reader
9. Digital camera
10. Gamepad

Note: The most common use keyboard is the QWERTY keyboard. Generally standard Keyboard has 104 keys.

1.2.3: Central Processing Unit (CPU)

A CPU is brain of a computer. It is responsible for all functions and processes. Regarding computing power, the CPU is the most important element of a computer system.

The CPU is comprised of three main parts:

- * *Arithmetic Logic Unit (ALU)*: Executes all arithmetic and logical operations. Arithmetic calculations like as addition, subtraction, multiplication and division. Logical operation like compare numbers, letters, or special characters
- * *Control Unit (CU)*: controls and co-ordinates computer components.
 1. Read the code for the next instruction to be executed.
 2. Read whatever data the instruction requires from cells in memory.
 4. Provide the necessary data to an ALU or register.
 5. If the instruction requires an ALU or specialized hardware to complete, instruct the hardware to perform the requested operation.
- * *Registers*: Stores the data that is to be executed next, "very fast storage area"

1.2.4 Output devices:

An output device is any piece of computer hardware equipment used to communicate the results of data processing carried out by an information processing system (such as a computer) which converts the electronically generated information into human- readable form.

Example on Output Devices:

1. Monitor
2. LCD Projection Panels
3. Printers (all types)
4. Speaker(s)
5. Projector

1.4: Operating System: An Overview

An operating system is system software that provides an interface for the user to interact with the computer. Without a computer operating system a computer would be useless. An OS is software which performs all the basic tasks like file management, memory management, process management, handling input and output, and controlling peripheral devices such as disk drives and printers.

The main purpose of operating system is to organize and control hardware and software. Some popular Operating Systems include Linux Operating System, Windows Operating System, VMS, OS/400, AIX, z/OS, etc.

1.5: Types of Operating System:

Operating systems are classified on the basis of various features such as user interaction, how many task they can perform at a time and how many processor they can support etc. on the basis of user Interaction Operating Systems are divided into two main Types:

- CLI(Command Line Interface) Operating System
- GUI(Graphical User Interface) Operating System

1.5.1: CLI (Command Line Interface) Operating System:

The command line is a text interface for your computer. It's a program that takes in commands, which it passes on to the computer's operating system to run. From the command line, you can

navigate through files and folders on your computer, just as you would with Windows Explorer on Windows or Finder on Mac OS.

1.5.2: GUI (Graphical User Interface) Operating System

This type of operating system provide graphical interface to the user to work on it easily. This type of operating system is gives friendly environment. The user can work on it by clicking the icons and open the file etc without write any command. You're Microsoft Windows and Mac OS is the great example of graphical user interface.

1.6: Microsoft Windows Operating System:

Microsoft Windows, also called **Windows OS**, computer operating system (OS) developed by Microsoft Corporation to run personal computers (PCs). Windows is a series of operating systems developed by Microsoft. Each version of Windows includes a graphical user interface, with a desktop that allows users to view files and folders in windows. For the past two decades, Windows has been the most widely used operating system for personal computers PCs.

The first version of Windows, released in 1985, was simply a GUI offered as an extension of Microsoft's existing disk operating system, or MS DOC. Windows for the first time allowed DOS users to visually navigate a virtual desktop, opening graphical "windows" displaying the contents of electronic folders and files with the click of a mouse button, rather than typing commands and directory paths at a text prompt.

1.7: WINDOWS AND ITS COMPONENTS

The main components of Windows when you start your computer are the:

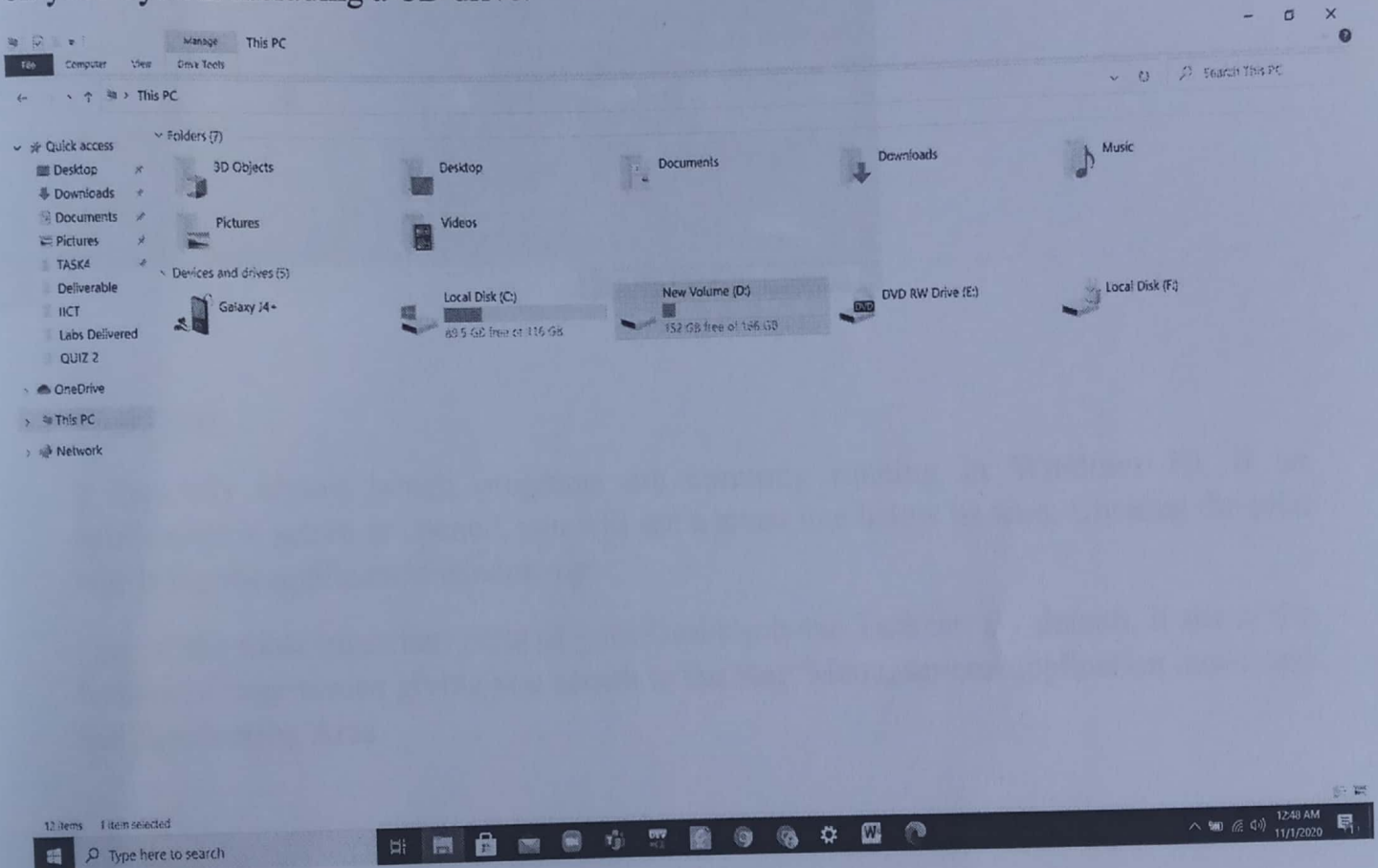
- 1) Desktop
- 2) My Computer
- 3) Recycle Bin
- 4) Start Button
- 5) Taskbar
- 6) My Documents
- 7) Windows Explorer
- 8) Internet Explorer

- 1) Desktop:

The Desktop is the very first screen you see after Windows starts. There you find the folders My Documents, My Computer, the Recycle Bin and any Shortcuts for applications and files that you have created

2) My Computer:

While installing the window you divide the hard disk into multiple partitions each one is referred to as a drive. When you double click the My Computer Icon it shows you all drives on your System including a CD drive.

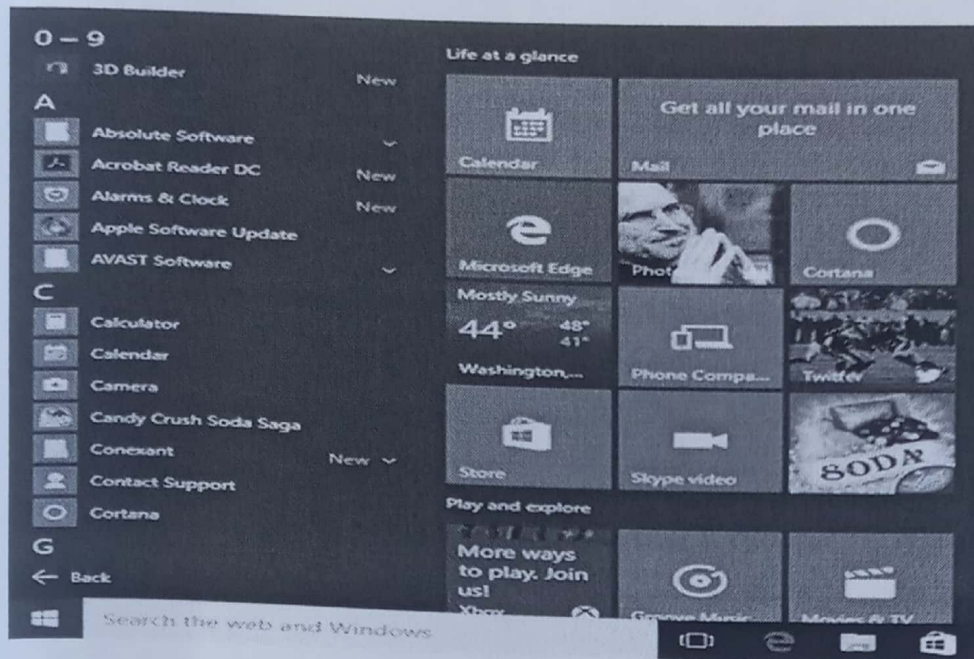


3) Recycle Bin:

The Recycle Bin acts a 'holding bay' for deleted items, such as files and folders (and even shortcuts!). When you delete a file or folder, it is not deleted from your computer permanently. Instead, Windows places the deleted items into the Recycle Bin.

4) Start Button:

Start allows you to access your computer programs and configure Microsoft Windows easily by accessing the Start menu.



5) Task Bar:

It typically shows which programs are currently running In Windows 10, if an application is active or opened, you will see a green line below its icon. Clicking the icon will bring the application window up.

One of the most important parts of your Desktop is the Taskbar. By default, it sits at the bottom of your screen giving you access to the Start Menu, several application icons, and the Notification Area

6) My Documents:

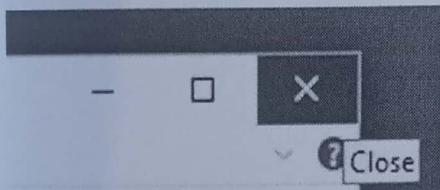
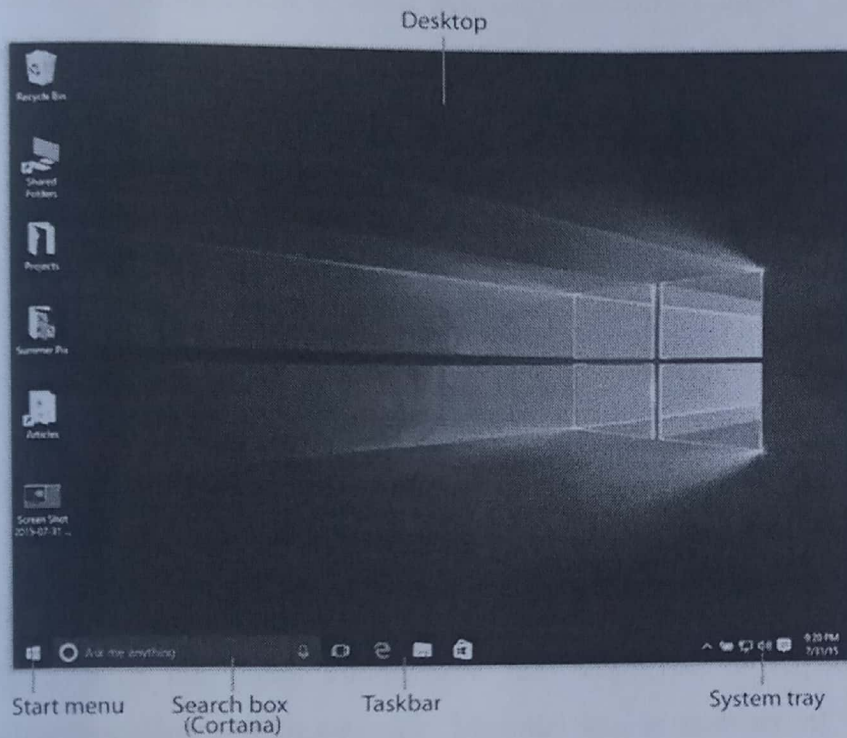
It is folder created by windows by installation time. It is a default folder for storing different kinds of documents. If you create a document of Microsoft Word or Microsoft Excel and don't specify the location where it should be saved then by default window will save it in my documents folder.

7) Windows Explorer:

Windows Explorer acts as directory browser and file manager for windows. It is an efficient way for locating for locating and managing files on your computer. Using explorer we can easily browse through all the Drives.

8) Internet Explorer:

Internet explorer is a Web browser that is launched with Microsoft Windows Operating System. It is used to surf Internet. It is powerful web browser providing advance features to Work on WWW.



Every open window features three buttons in the upper-right corner. These are used to minimize, maximize, or close the Window.

1.8: Learning Management System:

Learning management systems are the software hub of most online courses. In general, they have basic tools for assessment, communication, content management, data collection, and reporting. Some may have tools communication.

Purpose:

The main objective of Learning Management Systems is **to enhance the learning process**. A Learning Management System not only delivers content, but also handles registering courses, course administration, skill gap analysis, tracking, and reporting.

- Allow participants to be organized into groups and roles
- Present resources, activities and interactions within a course structure
- Provide for the different stages of assessment
- Report on participation; and have some level of integration with other institutional systems.

MOELLIM – LEARNING MANAGEMENT SYSTEM @ RIPHAH:

The learning management system at Riphah is based on an open source system called Moodle. The system has been customized and deployed at Riphah and is referred to as Moellim (<https://moellim.riphah.edu.pk>). Moodle has a number of features that support most of the pedagogical approaches associated with e-learning. At the heart of Moodle is courses that contain activities and resources.

For better understanding you can visit the following tutorial:

<https://www.youtube.com/watch?v=6k3pLmCgjzE>

Task 1.9: Use of email

Knowing how to use the email is an important form of communication in today's society. Compared to the old fashion mail and postal stamp, sending an email is faster, cheaper, and convenient. It is important to be able to send a message to inform or receive feedback from someone in a matter of seconds.

This Instruct able will show you how to send an email to someone of your choice. There are many email service providers you are able to use today and are bound to grow in the future. We will teaches you how to send an email by using Gmail. You can use the Gmail website to send email from a computer, or you can use the Gmail mobile app to send email from a smartphone or tablet.

What are the Requirements before starting?

- access to a computer
- account that is set up with the provider
- email address of the recipient

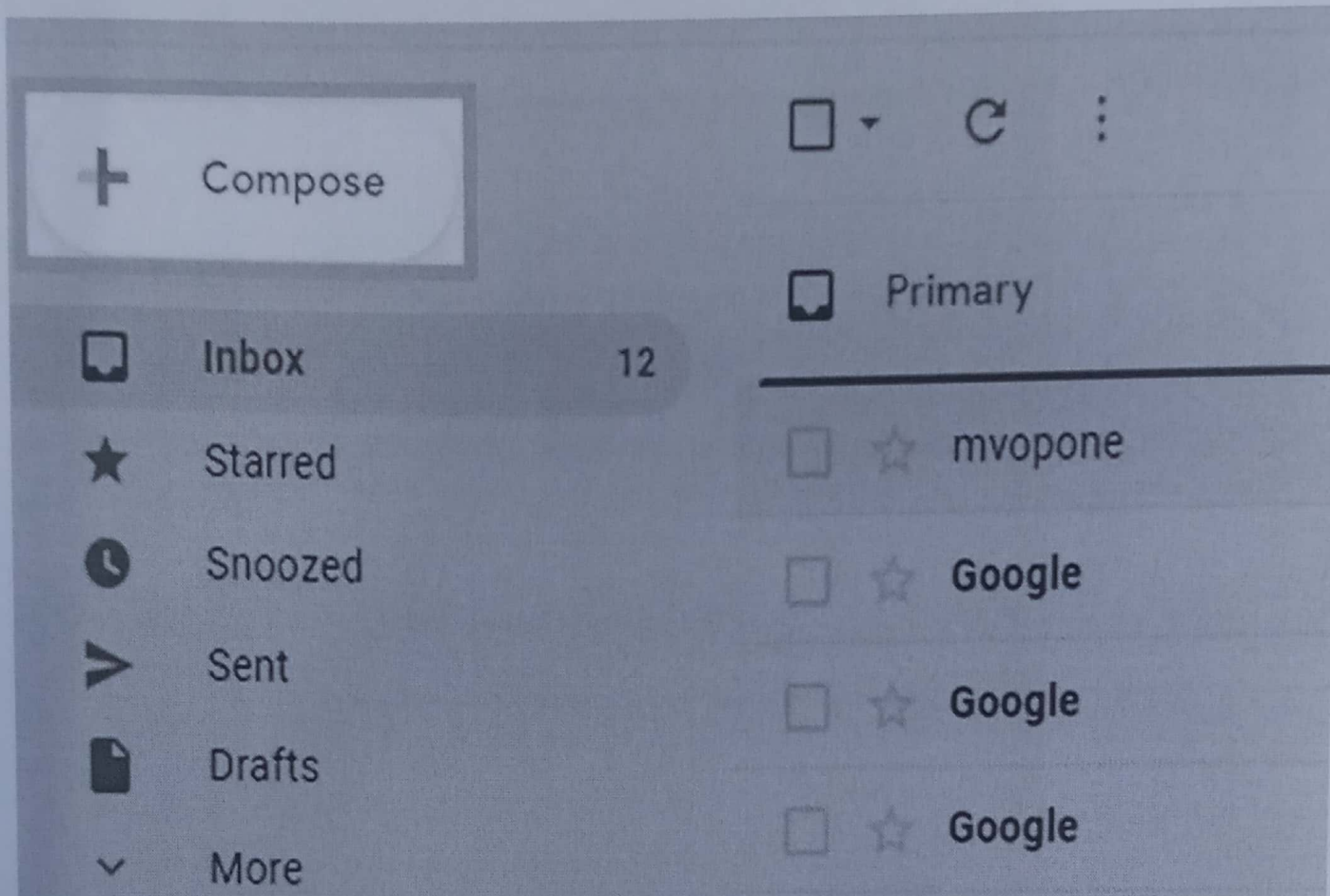
1.7: Although we are using Gmail in this example, please note that using other email provider, the steps listed here will be very similar if not the same steps required to send an email. Following are the steps to send an email using Gmail.

Step1: Open Gmail. Go to <https://www.gmail.com/> in your computer's web browser. This will open your Gmail inbox if you're logged in.


- If you aren't logged into your Gmail account, enter your email address and password when prompted

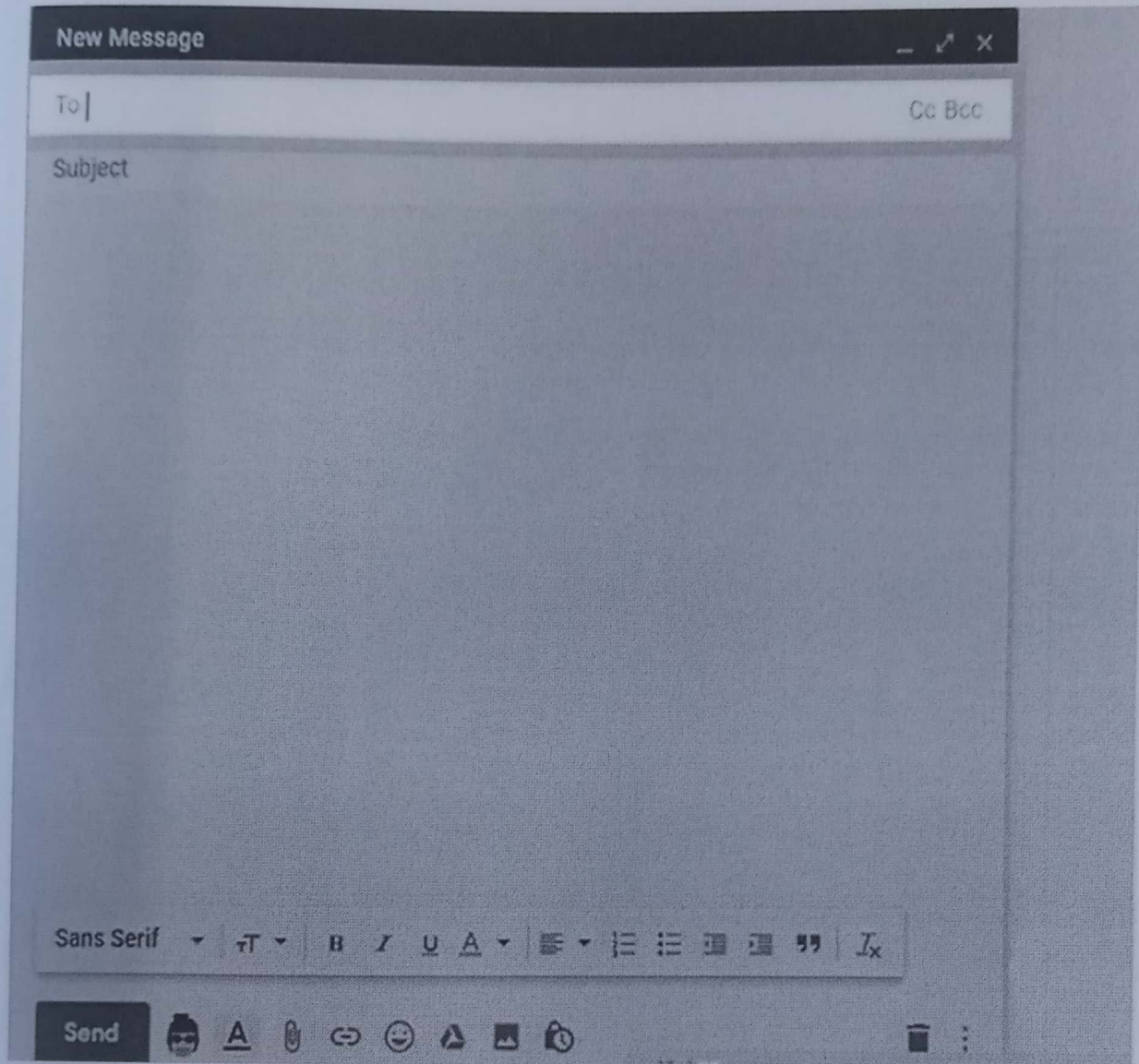
Step 2: Click + Compose. It's in the upper-left side of your Gmail inbox. Doing so opens a "New Message" window in the lower-right corner of the page.

- If you're using the old version of Gmail, you'll click **COMPOSE** here instead.



Step 3: Enter the other person's email address. Click the "To" or "Recipients" text box at the top of the New Message window, then type in the email address of the person to whom you want to send your email.

- To add multiple email addresses, type in the first email address, press **Tab** , and repeat with the other email addresses.
- If you want to CC or BCC someone on the email, click either the **Cc** link or the **Bcc** link in the far-right side of the "To" text field, then type the email address you want to CC or BCC into the "Cc" or "Bcc" text field, respectively.



Step 4: Add a subject. Click the "Subject" text field, then type in whatever you want the subject of the email to be.

- Typically speaking, an email subject describes the gist of the email's message in a few words.

New Message

reader@wikihow.com

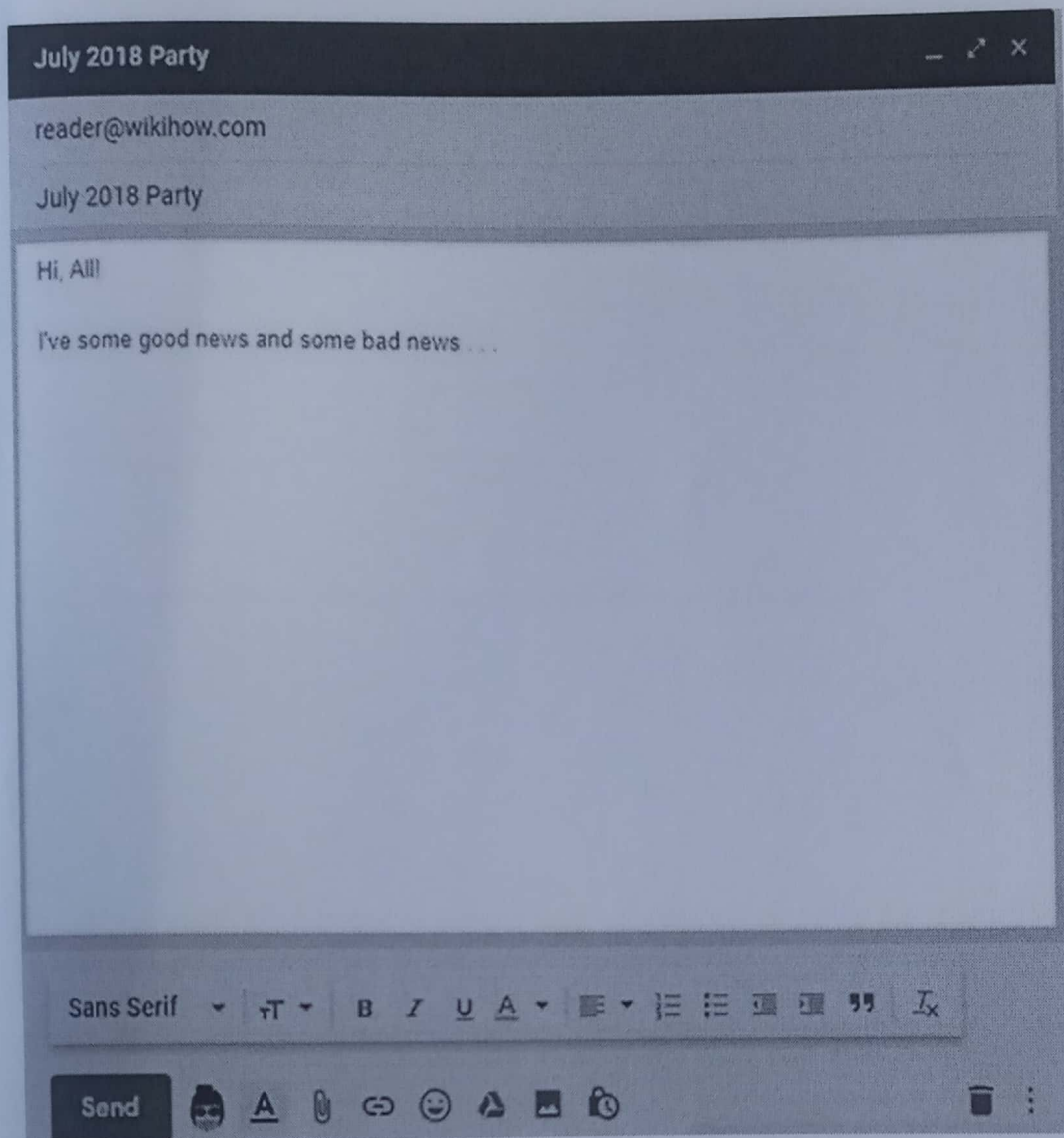
Subject

Sans Serif

Send

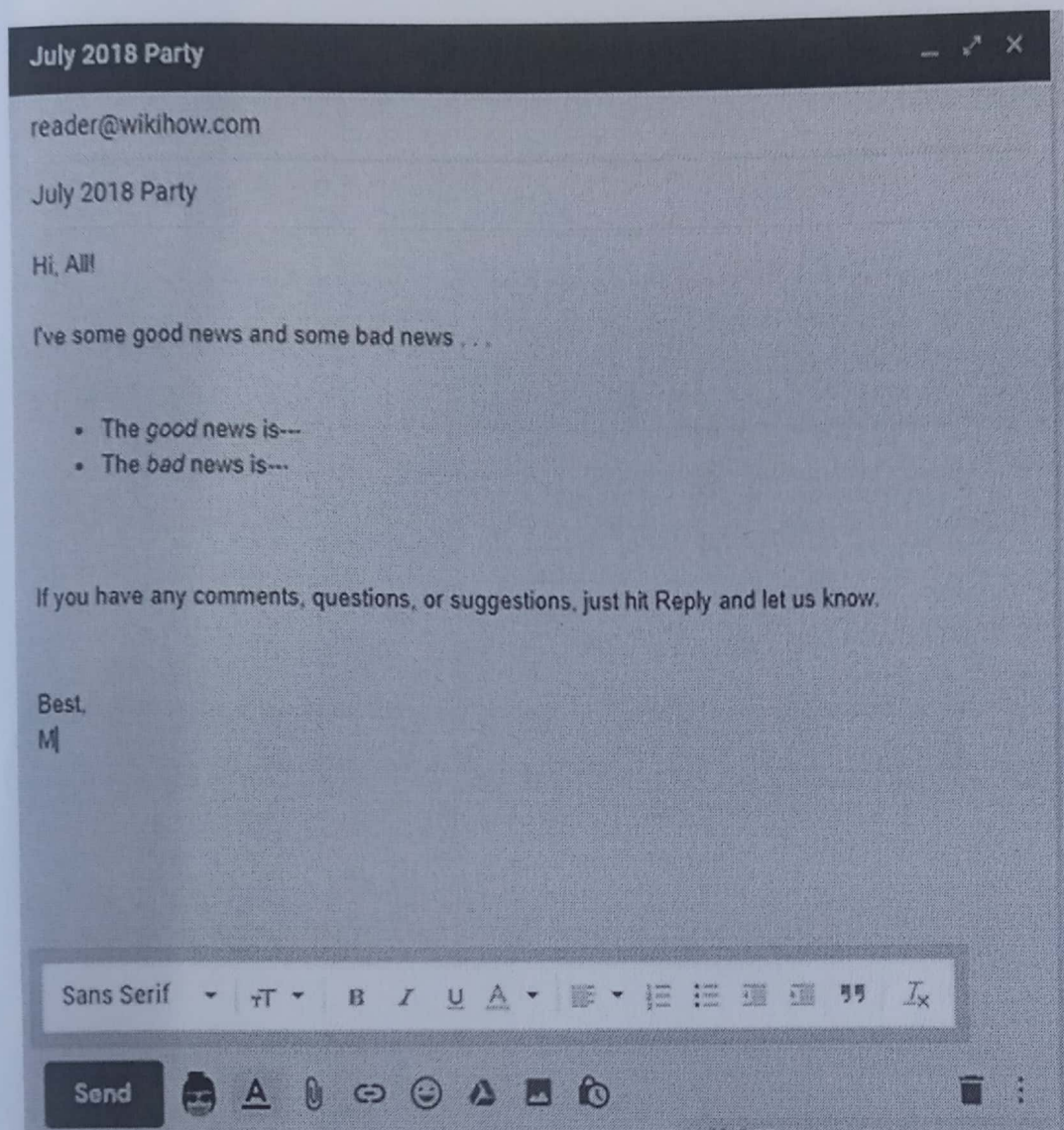
Rich text editor toolbar with icons for bold, italic, underline, text color, background color, bulleted list, numbered list, link, unlink, and other formatting options.

Step 5: Enter your email message. In the large text box below the "Subject" text box, type in whatever you want for your email message.



Step 6: Format your email's text if needed. If you want to apply formatting to your text (e.g., bolding, italics, or bullet points), highlight the text to which you want to apply the formatting, then click one of the formatting options at the bottom of the email window.

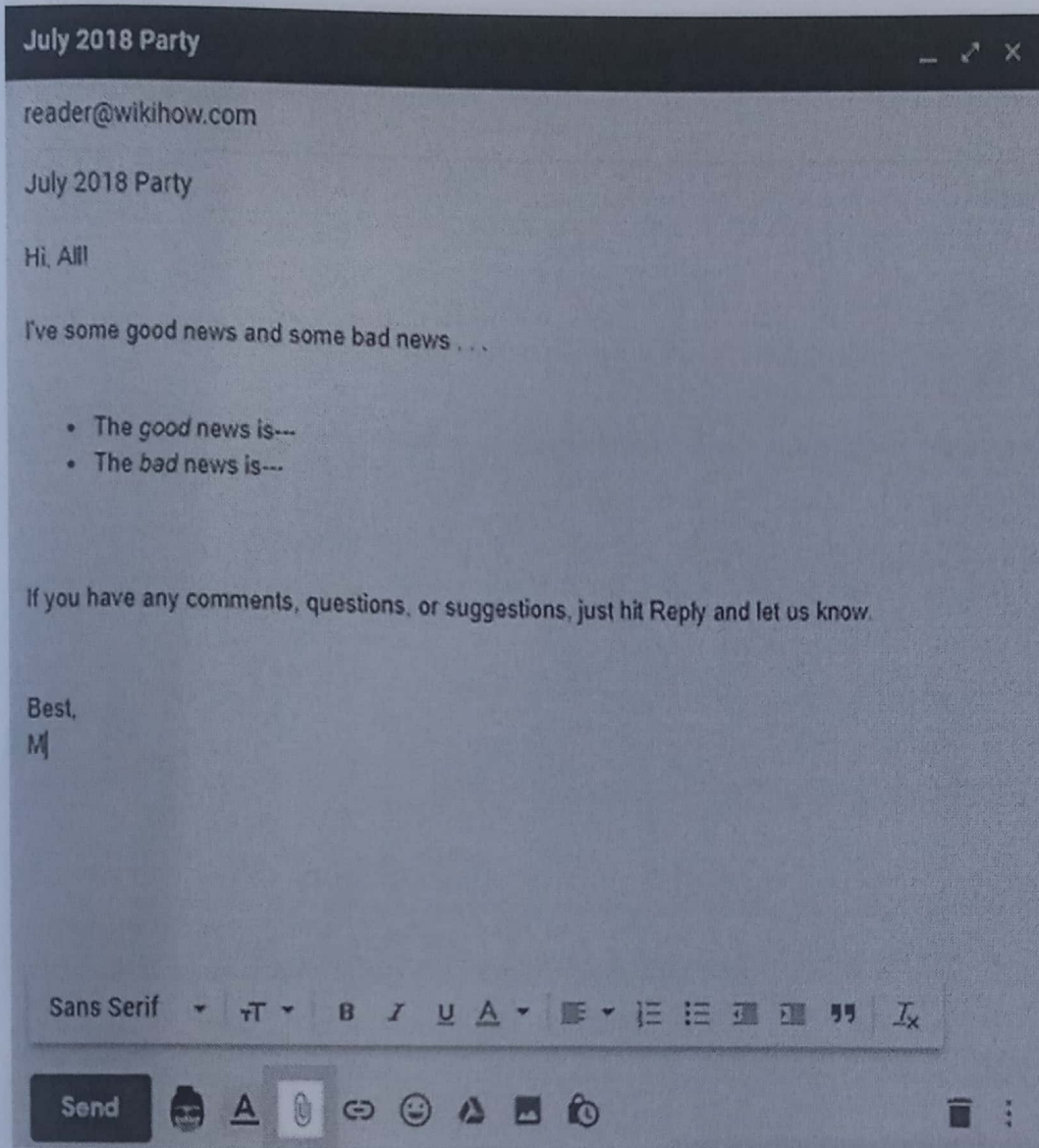
- For example, to bold a section of text, you would highlight the text and then click **B** at the bottom of the email.



Step 7: Attach a file if you like:

To add a file from your computer, click the "Attachments" icon at the bottom of the window, then select the file(s) you want to upload and click Open (or Choose on a Mac).

You can add photos in this way, or you can upload photos directly to the email's body by clicking the "Photos" icon at the bottom of the window, clicking Upload, clicking Choose photos to upload, and selecting photos as needed



Step 8: Click Send. It's a blue button in the bottom-left corner of the email window. Doing so will send your email to the specified email address(s).

reader@wikihow.com

July 2018 Party

Hi, All!

I've some good news and some bad news ...












- The *good* news is---
- The *bad* news is---

If you have any comments, questions, or suggestions, just hit Reply and let us know.

Best,

M

catnibbleears.mp4 (131K)

Sans Serif           

Send

