



تطبيقات الحاسوب
المحاظره الثانيه

م.م راويه رائد السعدي

Outline

Operating System

- Operating System function
- Types of operating system
- Features of operating system
- difference between operating system and software applications

Operating System

- **Operating System:**

A group of software that controls and addresses the physical components of the computer and provides a set of subscriber services for the software that carries after it. The tasks of operating systems differ according to different types and sizes of the computer.



Operating System function

1- Learn about the physical components of the computer

2- Controlling the way part of these parts works

3- Managing and arranging tasks while operating the computer and ensuring that they are not overlapped

4- Connecting the component parts of the device and organizing the data flow

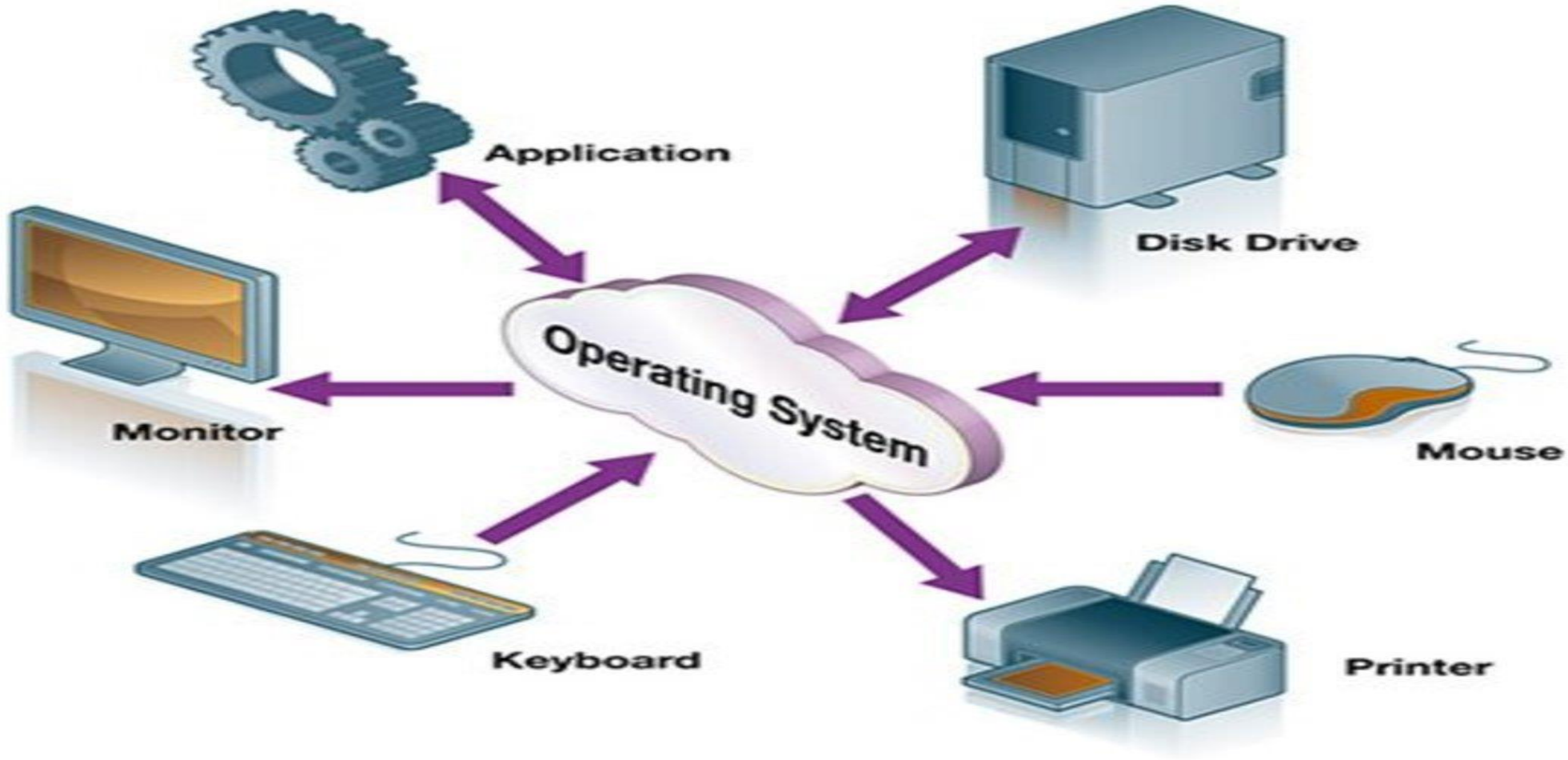
5- Reading and executing instructions and commands from the fixed reading memory(rom)

6- Receiving the device user's orders

7- Maintaining operating efficiency

8- Download the applied software and implement its instructions

The figure shows the functionality of the operating system with the hardware components of the computer



- **Types of operating system**

The operating system is classified into

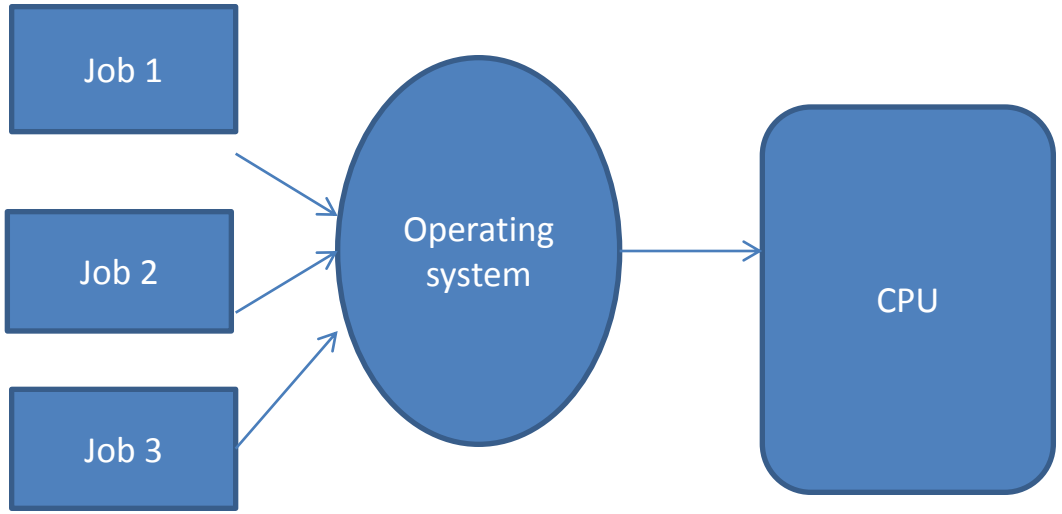
Firstly : according to the nature of the operating system

1. **Built in operating systems :**It is part of the device industry that is bulit into it and cannot be updated or repaired because it is installed on electronic chips placed inside devices such as car operating systems and home appliances
2. **Flexible operating systems not built in:** Such as operating systems stored on chipsets or magnetic disks

Secondly : according to the tasks:
It has the ability to run more than one program for the same user at the same time and is divided on this basis into two parts

1-multitasking

2-single tasking



Work by the operating system on more than one program

Thirdly: according to the users :
Allowing more than one user to run their programs at the same time and is divided on this basis into two parts

1-multi-user

2-single- user

Examples of some operating systems

- ✓ DOS
- ✓ MAC OS
- ✓ Microsoft windows
- ✓ Linux
- ✓ Android Os

Features of operating system

1. Security Management
2. Process Management
3. Storage and Memory Management
4. Disk Management
5. I/O Operations
6. Loading and Execution



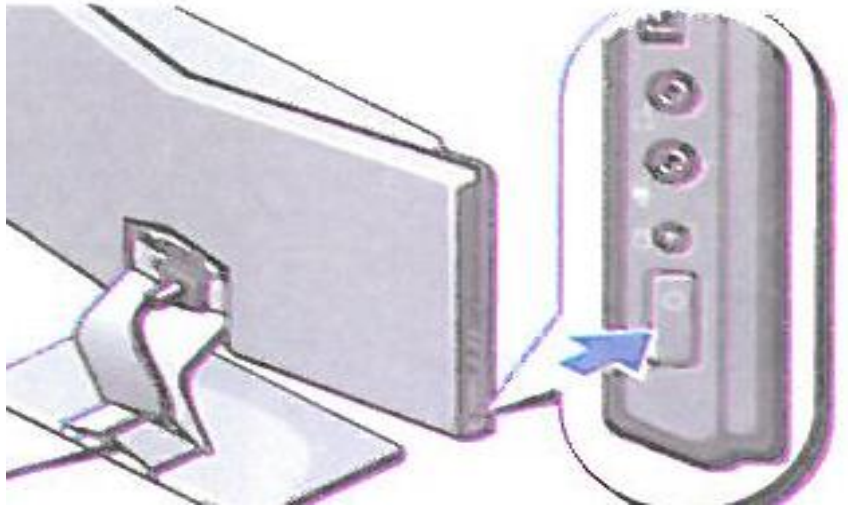
difference between operating system and software applications

software applications	**operating system**
1-A computer program which is intended to perform some task classified along. **2**-Application software is downloaded form internet **3**-It is developed by using virtual basic, c++, c, java. **4**-It is usually in Megabytes(MB) **5**-It is built to perform some specific tasks **6**-It always depends upon operating system. **7**-It's examples are Photoshop, VLC player etc.	**1-**A system computer program that manages hardware and software resources and provides common services for computer programs **2-**Operating system comes installed on the device purchased. **3-**It is developed by using c++, c, assembly languages. **4-**While it is usually is Gigabytes(GB). **5-**It works as interface between user and hardware and perform some variety of tasks like memory management, scheduling, process management etc. **6-**But it does not depend upon application software.it provides the path to execute or to run the application software. **7-**It's examples are Microsoft Windows, Linux, Unix, DOS.

Computer power on/off:

The computer is started by pressing the start button on the computer, whether it is a desktop or laptop computer

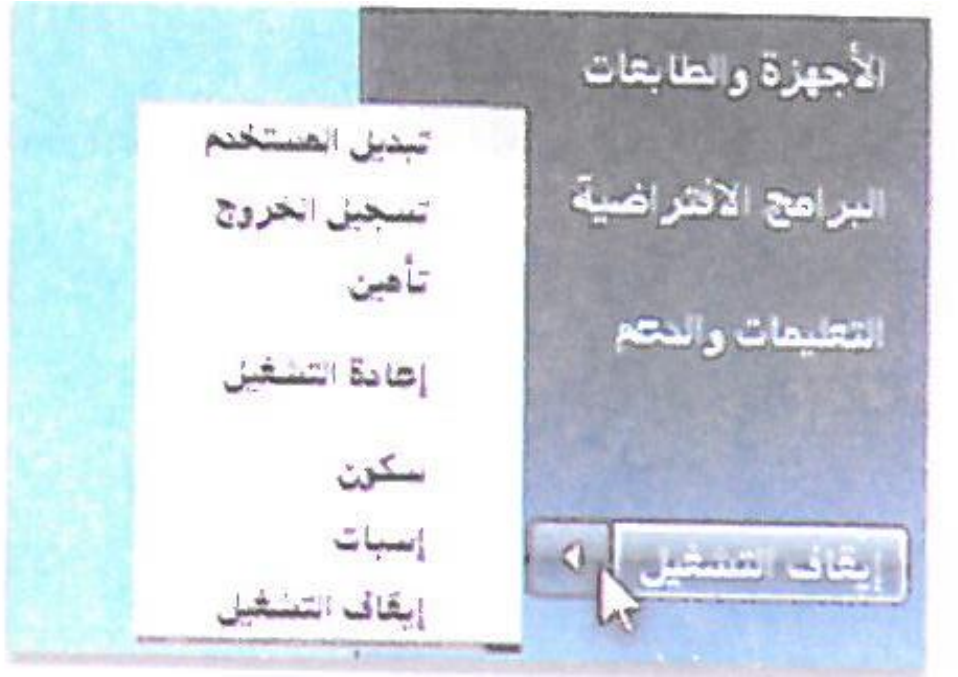


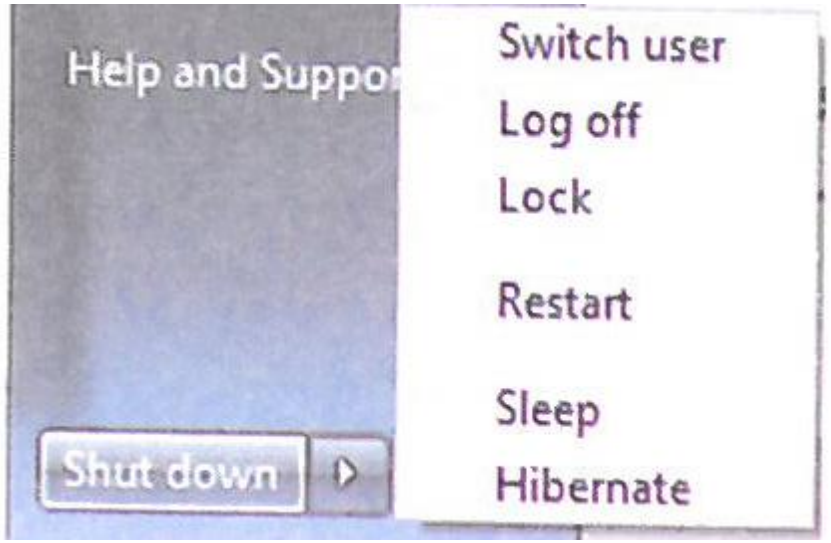


Shut down :

-It is intended to stop the computer from working.

-The shutdown button options appear in the lower corner of the Start menu.





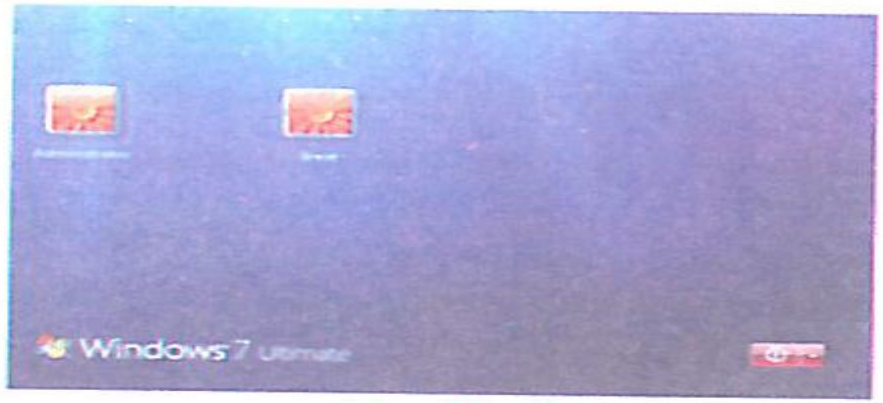
- When you click the shutdown button, the computer closes all open programs and shuts down the computer, and the shutdown button includes other sub-options.

❖ ***switch user***

It allows another person to log into the computer and Windows 7 may require you to enter a username and password, if any.



إدخال كلمة سر للدخول للحاسوب



تبديل حساب المستخدم

❖***Log off:***

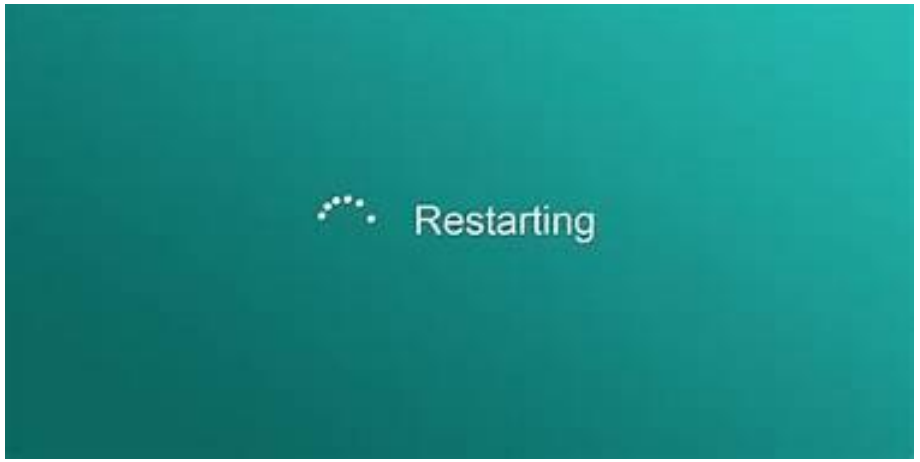
For the current user, close all programs, and make room for any other user installed on the computer to enter and use the computer



❖***Lock :***No one is allowed to enter, except for persons authorized to access the compute

❖**Restart :**The importance of restarting the computer lies when installing a new program or adding a physical part of the computer such as a printer or the computer stops working for some reason





❖***Sleep or Hibernate:***

They do the same work, which is to temporarily stop the computer from working and disappear the interfaces displayed on the screen, but they keep the open programs as they were when we cancelled the sleep or hibernate, and the purpose of that is to preserve the screen and reduce energy consumption

Thank you