Assignment 1

Q1 Define an operating system?

Answer The operating system (OS) is the most important program that runs on a computer. Every general-purpose computer must have an operating system to run other programs and [applications](http://www.webopedia.com/TERM/A/application.html). Computer operating systems perform basic tasks, such as recognizing input from the [keyboard](http://www.webopedia.com/TERM/K/keyboard.htm), sending output to the display screen, keeping track of files and directories on the disk, and controlling [peripheral devices](http://www.webopedia.com/TERM/P/peripheral_device.htm) such as printers.

Q2 name any five operating systems?

* Windows 10
* Apple's mac OS (formerly **OS** X)
* Linux
* Android
* Windows Server

Q3 Describe the basic components of the operating system ?

Answer -Kernel: the kernel provides the most basic level of control over all of the computer's hardware devices. It manages memory access for programs in the RAM, it determines which programs get access to which hardware resources, it sets up or resets the CPU's operating states for optimal operation at all times, and it organizes the data with File Systems.

-Program execution: The operating system provides an interface between an application program and the computer hardware, so that an application program can interact with the hardware

-Interrupts: Interrupts are central to operating systems, as they provide an efficient way for the operating system to interact with and react to its environment. Interrupts provide a computer with a way of automatically saving local register contexts, and running specific code in response to events. Even very basic computers support hardware interrupts, and allow the programmer to specify code which may be run when that event takes place.

-Memory management

-Multitasking & Disk access and file systems

-Networking & Security

-Graphical user interface: Most of the modern computer systems support graphical user interfaces (GUI). Graphical user interfaces evolve over time. For example, Windows has modified its user interface almost every time a new major version of Windows is released, and the Mac OS GUI changed dramatically with the introduction of Mac OS X in 1999

Q4 Overview of MS DOS operating system?

Short for **Microsoft Disk Operating System**, **MS-DOS** is a non-graphical command line operating system derived from 86-DOS that was created for IBM compatible computers. MS-DOS originally written by [Tim Paterson](http://www.computerhope.com/people/tim_paterson.htm) and introduced by [Microsoft](http://www.computerhope.com/comp/msoft.htm) in August [1981](http://www.computerhope.com/history/1981.htm) and was last updated in [1994](http://www.computerhope.com/history/1994.htm) when MS-DOS 6.22 was released. MS-DOS allows the user to navigate, open, and otherwise manipulate files on their computer from a command line instead of a [GUI](http://www.computerhope.com/jargon/g/gui.htm) like [Windows](http://www.computerhope.com/jargon/w/windows.htm).

Today, MS-DOS is no longer used; however, the command shell, more commonly known as the **Windows command line** is still used by many users. The picture to the right, is an example of what an MS-DOS window more appropriately referred to as the Windows command line looks like running under Microsoft Windows.

Most computer users are only familiar with how to navigate Microsoft Windows using the [mouse](http://www.computerhope.com/jargon/m/mouse.htm). Unlike Windows, MS-DOS is a command-line and is navigated by using MS-DOS commands. For example, if you wanted to see all the files in a folder in Windows you would double-click the folder to open the folder in Windows Explorer. In MS-DOS, to view that same folder you would navigate to the folder using the [cd command](http://www.computerhope.com/cdhlp.htm) and then list the files in that folder using the [dir command](http://www.computerhope.com/dirhlp.htm).

Q5 What are the different types of application ?

Answer Types of Software Applications

The following table describes different kinds of software applications that would be suitable for different tasks:

**Word Processing software** - Use this kind of tool to create worksheets, type letters, type papers, etc.

MS Word, WordPerfect, MS Works, AppleWorks

**Desktop Publishing software** - Use this software to make signs, banners, greeting cards, illustrative worksheets, newsletters, etc.

Adobe PageMaker, MS Word, MS Publisher, AppleWorks, MS Works, Quark Express

**Spreadsheet software** - Use this kind of tool to compute number-intensive problems such as budgeting, forecasting, etc. A spreadsheet will plot nice graphs very easily.MS Excel, Quattro Pro, Lotus 1-2-3, MS Works, Apple Works

**Database software** - Use this software to store data such as address, membership and other text information. A database can be used to easily sort and organize records.MS Access, File maker Pro, AppleWorks, MS Works.

**Presentation software** - Use this software to create multimedia stacks of cards/screens that can effectively present a lesson or a sales pitch. The user often clicks on buttons to advance to the next screen in a sequence.

MS PowerPoint, AppleWorks (slideshows), Hyper Studio, Flash, Director, HyperCard, Digital Chisel, Super Card, Corel Envoy

**Internet Browsers** - This software allows one to surf the Web. Often they can read email and create Web pages too. Netscape Navigator (or Netscape Communicator), MS Internet Explorer, AOL Browser

**Email programs** - These programs send and receive email.

Netscape Messenger (part of Netscape Communicator), MS Outlook Express, MS Outlook,

**Graphics Programs (pixel-based)**- This software allows one to touch up photographs and create graphics from scratch. Adobe Photoshop, Paint Shop Pro, AppleWorks, MS Works, MS Paint (comes free on Windows PC's), Painter.

**Graphics Programs (vector-based)**- This software creates graphics that are similar to illustrations or cartoon drawings. Adobe Illustrator, Corel Draw, Apple Works, MS Works, MS Word.

**Communications software** - This software allows two computers with modems to communicate through audio, video, and/or chat-based means.MS NetMeeting, AOL Instant Messenger, IRC, ICQ, CUSee Mer

Q What type of software is used for creating letters paper and other documents?

Anwer Word processor

Q What is a pixel?

A pixel is the smallest unit of a digital image or graphic that can be displayed and represented on a digital display device.

A pixel is the basic logical unit in digital graphics. Pixels are combined to form a complete image, video, text or any visible thing on a computer display.

A pixel is also known as a picture element.

Q What are the advantages of using ms Excel?

As the industry standard for spreadsheet software, Microsoft Excel comes with many advantages to the new user or the user transitioning from another spreadsheet package. Over several decades, Microsoft has updated, expanded and tweaked Excel to keep up with both modern technology and the needs of spreadsheet users. Here are a few of the advantages of using Microsoft Excel.

Compatibility with Other Excel Users

Compatibility with Other Financial and Data Manipulation Software

Again due to Excel's popularity, Excel spreadsheets can be inserted, viewed, imported or manipulated from within a variety of other popular software applications, from other Microsoft Office products to third-party accounting and tracking programs.

Robust Help and Assistance Availability

Beyond the extensive help documentation included within Microsoft Excel, users can also find many resources for help online, in libraries and in bookstores in the form of free tutorials, walk-through videos, support forums and comprehensive guides and how-to books.

Q 9 What technology is used in a compact disk?

Ans : The compact disc is an evolution of **Laser Disc** technology, where a focused **laser** beam is used that enables the high information density required for high-quality digital audio signals

Q 10 what is the file extension of ms word documents?

Answer Microsoft Word file formats:

**Docx :** default Word 2007/2010 extension

Dotx and dotm: Word 2007/2010 template files

**Doc :** Word 97-2003 format

**Dot** Word 97-2003 template format

Q What is primary memory?

**Answer** Primary memory is computer memory that a processor or computer accesses first or directly. It allows a processor to access running execution applications and services that are temporarily stored in a specific memory location.

Primary memory is also known as primary storage or main memory.

Q What is a logical Memory ?

Answer Logical addresses are bit like house numbers in a building. As long as you're inside the building, you need just the house number. But once you have the whole city, you need more than just the house number. You also need the street address of the building.   
A program is designed to work inside a building using only the house numbers. You could put it down in any building that has all the house numbers the program needs. The building is analogous to the memory block assigned to a program. The city is like the actual physical memory. It has hundreds of buildings which can be allocated to individual programs as per their requirements. The program doesn't know, and doesn't care about the other buildings.  
The city could be any combination of RAM and hard disk (swap space) in modern systems.

Q 12 What is virtual memory?

Answer Virtual memory is a feature of an Operating System that allows a computer to compensate for shortages of physical memory by temporarily transferring  pages o f data from random access memory RAM to disk storage