- **Multiprogramming**

Multiprogramming is also the ability of an operating system to execute more than one program on a single processor machine. More than one task/program/job/process can reside into the main memory at one point of time. A computer running excel and firefox browser simultaneously is an example of multiprogramming.

- **Multitasking**

Multitasking is the ability of an operating system to execute more than one task simultaneously on a single processor machine. Though we say so but in reality no two tasks on a single processor machine can be executed at the same time. Actually CPU switches from one task to the next task so quickly that appears as if all the tasks are executing at the same time. More than one task/program/job/process can reside into the same CPU at one point of time.

- **Multiprocessing**

Multiprocessing is the ability of an operating system to execute more than one process simultaneously on a multiprocessor machine. In this, a computer uses more than one CPU at a time.

- **Multithreading**

Multithreading is the ability of an operating system to execute the different parts of a program called threads at the same time. Threads are the light wait processes which are independent part of a process or program. In multithreading system, more than one threads are executed in parallel on a single CPU.