

**CPU-bound process:** process spends more time doing computations, few very long CPU bursts

**Cooperating process:** process can affect or be affected by the execution of another process.

**Short term scheduler:** selects from the ready queue which process should be executed next and allocates CPU.

**Dispatch Latency:** time it takes for the dispatcher to stop one process and start one another running.

**Process Control Block (PCB):** contains many pieces of information associated with a specific process including: process state, program counter, CPU registers...

**Operating System:** A program that acts as an intermediary between a user of a computer and the computer of the hardware

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**Process:** a program in execution, which forms the basis of all computation.

**Interrupt Service Routing:** Separate segment of code determine what action should be taken for each type of interrupt.

**Interrupt Vector:** table of pointers to addresses interrupt services routines for the various devices, stored in low memory.

**Trap:** is a software generated interrupt caused either by an error or a user request.

**Caching:** copying information into faster storage system.

**Multiprogramming:** Loading several processes in computer's main memory at the same time so, CPU always has one to execute for improving system efficiency.

**System Calls:** programming interface to the services provided by the OS, typically written in high level language and mostly accessed via a high level API.

**Ready Queue:** set of all process residing in main memory, ready and waiting to execute.

**Swapping:** the technique used by OS to manage memory. Swapping is operation of moving processes between main memory and disk.

**Data Parallelism:** distributes subsets of the same data across multiple cores, same operation on each.

**Task Parallelism:** distributes threads across cores, each thread performing unique operation.

**OpenMP:** is a set of compiler directives as well as an API for programs written in C, C++, or FORTRAN that provides support for parallel programming.

**Context switch time:** is overhead; the system does no useful work to user process while switching.

**Critical Section:** a section of code, common to n cooperating processes, in which the processes may be accessing common variables.

**Trap:** is a software generated interrupt caused either by an error or a user request.