

is terminated by the operating system, it is moved to the terminated state where it waits to be removed from main memory.

Process States

Process Control Block (PCB)

A Process Control Block is a data structure maintained by the Operating System for every process. The PCB is identified by an integer process ID (PID). A PCB keeps all the information needed to keep track of a process as listed below in the table –

S.N.	Information & Description
1	Process State
2	Process privileges
3	Process ID
4	Pointer
5	Program Counter
6	CPU registers
7	CPU Scheduling Information
8	Memory management information
9	Accounting i

The current state of the process i.e., whether it is ready, running, waiting, or whatever.

Process privileges

This is required to allow/disallow access to system resources.

Process ID

Unique identification for each of the process in the operating system.

Pointer

A pointer to parent process.

Program Counter

Program Counter is a pointer to the address of the next instruction to be executed for this process.

CPU registers

Various CPU registers where process need to be stored for execution for running state.

CPU Scheduling Information

Process priority and other scheduling information which is required to schedule the process.

Memory management information

This includes the information of page table, memory limits, Segment table depending on memory used by the operating system.

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