

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

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

2

Process privileges

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

3

Process ID

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

4

Pointer

A pointer to parent process.

5

Program Counter

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

6

CPU registers

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

7

CPU Scheduling Information

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

8

Memory management information

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

9

Accounting information

This includes the amount of CPU used for process execution, time limits, execution ID etc.

10

IO status information

This includes a list of I/O devices allocated to the process.

Process

A process is basically a program in execution. The execution of a process must progress in a sequence