s.

3
Running

Once the process has been assigned to a processor by the OS scheduler, the process state is set to running and the processor executes its instructions.

4
Waiting

Process moves into the waiting state if it needs to wait for a resource, such as waiting for user input, or waiting for a file to become available.

5
Terminated or Exit

Once the process finishes its execution, or it 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

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

CP