

## Practical 4

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The practical focuses on understanding process management in the linux operating system. It involves in the linux studying how processes are created, identified, executed & terminated having system calls & commands. The experiment demonstrate the use of process identifiers such as PID & PPID, creation of parent & child process using fork() system call and processes like orphan & zombie.

### • Orphan Process

→ An orphan process is a child process whose parent process terminates before the child finishes execution. The orphan process is adopted by the init or system process.

### • Zombie Process

→ A zombie process is a child process that has completed execution but still remains in the process table because its parent has not read its exist status.

### • Process

→ A process is an instance of a program that is currently being executed in operating system. It includes program code, data, stack & system resources.



## Process ID (PID)

→ Process ID (PID) is a unique numerical identifier assigned by the operating system to each running process for identification & management.

## Parent Process

A parent process is a process that creates one or more child processes using system calls such as `fork()`.

## Child Process

A child process is a newly created process that is generated by a parent process & executes independently.