

## Practical 4.

Q1. How to kill process in LINUX  
→ Imagine your computer is a bit slow because too many programs are running. To reduce load, you can "kill" unnecessary programs.

### ① Kill by PID

- Every process has a unique ID (PID).
- Command:

`kill <PID>`

eg:- `kill 1234`

### ② Kill by process name

- You can kill a program just by its name.
- Command:

`killall <process-name>`

eg:- `killall firefox`

### ③ Another way: `pkill`

- works similar to `killall`
- Command:

`pkill <process-name>`

Q2. Process creation in C (Orphan & Zombie).

Think of processes like children and parents.

① Orphan process

- child process whose parent dies first
- OS adopts it (like a guardian take care of it).
- use `fork()` in C to create a child and make parent sleep / exit first.

② Zombie Process

- child finishes work but parent hasn't "noticed" it yet.
- It stays in the process table like a ghost → that's why called zombie.
- use `fork()` and let child finish quickly, parent sleeps.

`fork()` - make a new process

`getpid()` - shows process ID

`getppid()` - shows parent process ID



Q3 Rank 1) - child & parent process.

- Parent → original process, makes child
- Child → new process created
- Both have their own PIDs
- Child can know who its parent is using getpid 1).