

Output:-

1. Adam is working in an it company. He has been given a task to reduce the load of a system by killing some of the processes running in the LINUX operating system.
Which commands will he use ?

```
Parent sleeping
m309@m309-BY-OEM:~$ 
m309@m309-BY-OEM:~$ 
m309@m309-BY-OEM:~$ 
m309@m309-BY-OEM:~$ 
m309@m309-BY-OEM:~$ 
m309@m309-BY-OEM:~$ nano zombie.c
m309@m309-BY-OEM:~$ sleep 500 &
[1] 6481
m309@m309-BY-OEM:~$ kill 6481
m309@m309-BY-OEM:~$ ps -ef | grep sleep
root      6479     1663  0 17:20 ?        00:00:00 sleep 3600
m309      6498     3124  0 17:22 pts/0    00:00:00 grep --color=auto sleep
[1]+  Terminated                  sleep 500
m309@m309-BY-OEM:~$ sleep 500 &
[1] 6500
m309@m309-BY-OEM:~$ pkill sleep
pkill: killing pid 6479 failed: Operation not permitted
[1]+  Terminated                  sleep 500
m309@m309-BY-OEM:~$ pgrep sleep
6479
m309@m309-BY-OEM:~$ sleep 500 &
[1] 6507
m309@m309-BY-OEM:~$ killall sleep
sleep(6479): Operation not permitted
[1]+  Terminated                  sleep 500
m309@m309-BY-OEM:~$ ls
Desktop   Downloads  fork      Music      orphan.c  Public  Templates  zombie
Documents file.txt  fork.c    orphan    Pictures   snap     Videos    zombie.c
m309@m309-BY-OEM:~$
```

- Kill a single process at a time with the given process ID

```
m309@m309-BY-OEM:~$ sleep 1000 &  
[1] 3263  
m309@m309-BY-OEM:~$ kill 3263  
m309@m309-BY-OEM:~$ █
```

- Kill a process based on the process name

```
m309@m309-BY-OEM:~$ nano zombie.c  
m309@m309-BY-OEM:~$ gcc zombie.c -o zombie  
m309@m309-BY-OEM:~$ ./zombie  
Child process exiting  
Parent process
```

Write a program for process creation using C

- Orphan Process

```
m309@m309-BY-OEM:~$ nano orphan.c
[1]+  Terminated                  sleep 1000
m309@m309-BY-OEM:~$ gcc orphan.c -o orphan
m309@m309-BY-OEM:~$ ./orphan
Parent process exiting
m309@m309-BY-OEM:~$ Child process running
```

- Zombie Process

```
m309@m309-BY-OEM:~$ nano zombie.c
m309@m309-BY-OEM:~$ gcc zombie.c -o zombie
m309@m309-BY-OEM:~$ ./zombie
Child process exiting
Parent process
```