

Abhi: Adam is working in a 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 to complete the given task with
the help of the following operation?

- Kill Processes by name
- Kill a process based on the process name
- Kill a single process at a time with the
given process ID.

Q PS-ef: To display all running process in
system.

Q Killall process name: Kill all running with
given name.

Q Pkill process - name: Kill process by matching
their name or pattern.

Q Kill PID: safely eliminates one specific
process.

Q Kill -g: forcefully kill a process (used
when it is stuck)

Q sleep 300 s: To create a dummy process
for testing.

○ Kill all sleep :- To terminate all process
subprocess with the same name.

* write a program for process creation

○ Orphan process

○ Orphan process :- Creates when the parent
process terminates before the child process
the child process continue execution
and is adopted by the system.

○ nano orphan.c :- To create and write a
C program for orphan process.

○ gcc orphan.c -o orphan :- To compile
the C program.

○ ./orphan :- To execute the compiled
program.

○ ps -ef | grep orphan :- To verify the
running orphan process.

1) Zombie Process:-

○ Zombie process - create when the child process terminates but the parent process does not call `wait()`. The child remain in the zombie state until the parent exits.

○ `wait()` - To create the zombie process program.

○ gcc zombie.c -o zombie - To compile the zombie program.

○ `./zombie` - To execute the zombie process program.

○ `ps -el | grep zombie` - To check the zombie process status.