Computer Science and Information Technology
Department
CSC308-Operating Systems
Process Creation and Execution

Objective:
This lab describes how a program can create, terminate, and control child processes. Actually, there are

Process Creation Concepts
Processes are the primitive units for allocation of system resources. Each process has its own address sp

Processes are organized hierarchically. Each process has a parent process, which explicitly arranged to

A process ID number names each process. A unique process ID is allocated to each process when it is c

Processes are created with the fork() system call (so the operation of creating a new process is sometime

After forking a child process, both the parent and child processes continue to execute normally. If you wa

A newly forked child process continues to execute the same program as its parent process, at the point w

When a child process terminates, its death is communicated to its parent so that the parent may take som

Monitoring Processes
To monitor the state of your processes under Unix use the ps command.

ps [-option]

Used without options this produces a list of all the processes owned by you and associated with your term

The information displayed by the ps command varies according to which command option(s) you use and

These are some of the column headings displayed by the different versions of this command.

PID ■SZ(size in Kb) TTY(controlling terminal) TIME(used by CPU) COMMAND

Examples:

To display information about your processes those are currently running:

% ps

To display information about all your processes

% ps -u mohammed

To generate long list of all processes currently running:

% ps -ly