Course Name: Operating Systems	**Course Code: CMPE-331L**
Assignment Type: Lab	**Dated: 08-09-2022**
Semester: 5th	**Session:** 2020-2024
Lab #: 1	**CLOs to be covered:** 1
Lab Title: *Process Intro*	**Teacher Name: Darakhshan Abdul Ghaffar**

Name: ……. **Registration number: ……**

Date: ……. **Signatures:** **……**

Lab Evaluation:

CLO1	Implement programs to create new processes that communicate with each other through signals					
Levels (Marks)	**Level1**	**Level2**	**Level3**	**Level4**	**Level5**	**Level6**
Cognitive (5)						
					Total	**/5**

Rubrics for Current Lab (Optional):

Scale	**Marks**	**Level**	**Rubric**
Excellent	**5**	L1	Run the code snippet, have concepts and explained output on the terminal.
Very Good	**4**	L2	Run the code snippet, have concepts but couldn't explain output on terminal.
Good	**3**	L3	Run the code snippet and understands how the code works.
Basic	**2**	L4	Run the code snippet but have weak understanding.
Barely Acceptable	**1**	L5	Run the code snippet but have no understanding.
Not Acceptable	**0**	L6	Lab missed or implemented none of the task

LAB DETAILS:

Lab Goals/Objectives:

- To understand how a process states change as a program runs

Lab Evaluation:

In this question, we will understand the hardware configuration of your working machine using the /proc file system.

(a) Run command more /proc/cpuinfo and explain the following terms: processor and cores. Use the command lscpu to verify your definitions. You may want to understand the concept of CPU hyper threading at a high level before attempting this question.

(b) How many cores does your machine have?

(c) How many processors does your machine have?

(d) What is the frequency of each processor?

(e) What is the architecture of your CPU?

(f) How much physical memory does your system have?

(g) How much of this memory is free?

(h) What is total number of number of forks and context switches since the system booted up?