

National University of Computer & Emerging Sciences
Department of Computer Science
Operating System Lab
Lab # 07
Process Creation Part-2

Instructions:

1. Make a word document with the convention "SECTION_ROLLNO _LAB-NO".
2. You have to submit a Word File containing your codes with comments and screenshots of their running outputs.
3. Plagiarism is strictly prohibited, negative marks would be given to students who cheat

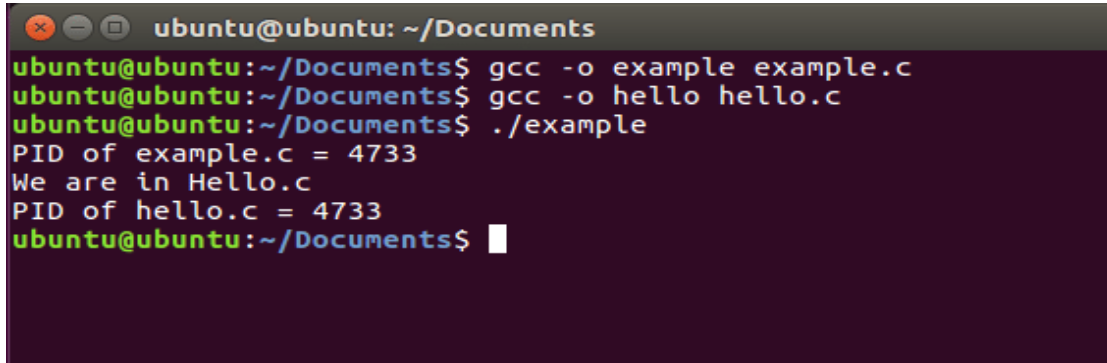
Problem statement 1– Write a program to create one parent with three child using two fork() function where each process find its Id

```
Output :parent
28808 28809
  my id is 28807
First child
0 28810
my id is 28808
Second child
28808 0
my id is 28809
third child
0 0
```

Problem statement 2– Run one example of your choice of each of the following and write 1-2 line explanation elaborating the example.

- `int execl(const char *path, const char *arg, ..., NULL);`
- `int execlp(const char *file, const char *arg, ..., NULL);`
- `int execv(const char *path, char *const argv[]);`
- `int execvp(const char *file, char *const argv[]);`
- `int execl(const char *path, const char *arg, ..., NULL, char * const envp[]);`
- `int execve(const char *file, char *const argv[], char *const envp[]);`

Problem statement 3– Create two .C or .c++ files , **example** and **hello** and replace the example with hello by calling exec() function in example. Output should be like

A terminal window with a dark purple background and light green text. The window title is 'ubuntu@ubuntu: ~/Documents'. The terminal shows the following commands and output:

```
ubuntu@ubuntu:~/Documents$ gcc -o example example.c
ubuntu@ubuntu:~/Documents$ gcc -o hello hello.c
ubuntu@ubuntu:~/Documents$ ./example
PID of example.c = 4733
We are in Hello.c
PID of hello.c = 4733
ubuntu@ubuntu:~/Documents$
```