

University of Engineering and Technology, Lahore
Operating System

Semester: 6th

Session: 2019-2023

Classwork-2 (Individual)
System Calls→ Process Control System Calls

Task 1

Write a C/C++ Program to to create a great grandchild of a process i.e.,

Parent-> Child -> Child -> Child,

Do incorporate checks to ensure that no extra siblings
are created.

Task 2

AIM:

To load an executable program in a child processes exec system call.

ALGORITHM:

1. Firstly create a text file named data.txt in which write "My name is _____ (YOUR NAME) and my roll number is _____(YOUR ROLL NUMBER)".
2. Create a program named "test.c". In this program read this text file.
3. Now create a new program named "exec.c". In this program create a child process and in that child load the program "test.c".
4. If return value is -1 then
 - a. Print "Process creation unsuccessful"
 - b. Terminate using exit system call.
5. Stop.

Hints:

```
#include <unistd.h> /* for fork */
```

```
#include <sys/types.h> /* for pid_t */
```

```
#include <sys/wait.h> /* for wait */
```