**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 \*/