

EX NO: 5

System Calls Programming

Aim: To experiment system calls using fork(), execlp() and pid() functions.

Program:

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
int main() {
    int pid;
    pid = fork();
    printf("THIS LINE EXECUTED TWICE\n");

    if (pid == -1) {
        printf("CHILD PROCESS NOT CREATED\n");
        exit(0)
    }
    else if (pid == 0) {
        printf("CHILD PROCESS:\n");
        printf("Child Process ID: %d\n", getpid());
        printf("Parent Process ID: %d\n", getppid());
    }
    else {
        printf("PARENT PROCESS:\n");
        printf("Parent Process ID: %d\n", getpid());
        printf("Parent's Parent Process ID: %d\n", getppid());
    }
    printf("IT CAN BE EXECUTED TWICE\n");
    return 0;
}
```

OUTPUT :

```
THIS LINE EXECUTED TWICE
PARENT PROCESS:
Parent Process ID: 14551
Parent's Parent Process ID: 14550
IT CAN BE EXECUTED TWICE
THIS LINE EXECUTED TWICE
CHILD PROCESS:
Child Process ID: 14555
Parent Process ID: 14551
IT CAN BE EXECUTED TWICE
```