

# OPERATING SYSTEMS

## Lab Assignment – 3

**Name:- Panduga Venkata Jaya Srikanth Reddy**

**Reg No:- 21MIS1095**

**1. Using the process creation check whether it is child or parent to create the process and print the parent and child process ID's (Using C Programming).**

**CODE:-**

```
#include <stdio.h>
#include <sys/types.h>
#include <unistd.h>
int main()
{
    pid_t pid;
    pid=fork();
    printf("Before FORK - Process ID is %d \n",pid);
    if(fork(<0)
    {
        printf("The Process is FAILED");
    }
    else if(pid==0)
    {
        printf("CHILD PROCESS: \n");
        printf("PID of CHILD is %d \n",getpid());
        printf("PID of PARENT is %d \n",getppid());
    }
    else
    {
        printf("PARENT PROCESS: \n");
        printf("PID of PARENT is %d \n",getpid());
        printf("PPID of PARENT is %d \n",getppid());
        printf("PID of CHILD is %d \n",pid);
    }
    return 0;
}
```

```
srikanth@srikanth-Vostro-15-3568: /mnt/5668922568920441/Third Year/OS/LAB$ gcc Lab3.c
srikanth@srikanth-Vostro-15-3568: /mnt/5668922568920441/Third Year/OS/LAB$ ./a.out
Before FORK - Process ID is 2580
PARENT PROCESS:
Before FORK - Process ID is 0
PID of PARENT is 2579
PPID of PARENT is 2568
PID of CHILD is 2580
PARENT PROCESS:
PID of PARENT is 2581
PPID of PARENT is 2579
PID of CHILD is 2580
CHILD PROCESS:
PID of CHILD is 2580
PID of PARENT is 2579
CHILD PROCESS:
PID of CHILD is 2582
PID of PARENT is 2580
srikanth@srikanth-Vostro-15-3568: /mnt/5668922568920441/Third Year/OS/LAB$ s
```

## 2. Print 0-9 Numbers using the process creation

### CODE:-

```
#include <stdio.h>
#include <sys/types.h>
#include <unistd.h>
int main()
{
    int i;
    if(fork()==0)
    {
        for(i=0;i<10;i++)
        {
            printf("%d\n",i);
        }
    }
}
```

```
srikanth@srikanth-Vostro-15-3568: /mnt/5668922568920441/Third Year/...  
srikanth@srikanth-Vostro-15-3568: /mnt/5668922568920441/Third Year/OS/LAB$ gcc Lab32.c  
srikanth@srikanth-Vostro-15-3568: /mnt/5668922568920441/Third Year/OS/LAB$ ./a.out  
0  
1  
2  
3  
4  
5  
6  
7  
8  
9  
srikanth@srikanth-Vostro-15-3568: /mnt/5668922568920441/Third Year/OS/LAB$
```