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LAB TASK 7

CODE:

```c
#include<stdio.h>
#include<stdlib.h>
#include<unistd.h>

int main()
{
        int pid = fork();
        printf("PID:%d \n",pid);
        if(pid == 0)
        {
                for(int i=0; i<5; i++)
                {
                        printf("Parent of Child:%d \n",getppid());
                        sleep(3);
                }
        }
        else if(pid > 0)
        {
                printf("Parent PID:%d \n",getpid());
                sleep(2);
                exit(0);
        }

        return 0;
}
```

Output:

```
usman@usman-Inspiron-3520:~/os_lab/os_labWork$ gedit os_lab7.c
usman@usman-Inspiron-3520:~/os_lab/os_labWork$ gcc os_lab7.c -o output.o
usman@usman-Inspiron-3520:~/os_lab/os_labWork$ ./output.o
PID:6128
Parent PID:6127
PID:0
Parent of Child:6127
usman@usman-Inspiron-3520:~/os_lab/os_labWork$ Parent of Child:1580
Parent of Child:1580
Parent of Child:1580
Parent of Child:1580

usman@usman-Inspiron-3520:~/os_lab/os_labWork$
```

Explanation:
If the parent process dies before the child, then ***Init*** is assigned to be the parent of that child and this process is the parent of the processes.