

Ex No.: 5

SYSTEM CALLS PROGRAMMING

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Aim :

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

Code:

```
#include<stdio.h>
#include<stdlib.h>
int main( )
{
    int pid;
    pid=fork( );
    printf("\n THIS LINE EXECUTED TWICE");
    if(pid== -1)
    {
        printf("\n CHILD PROCESS NOT CREATED\n");
        exit(0);
    }
    if(pid==0)
    {
        printf("\n I AM CHILD PROCESS AND MY ID IS %d \n",getpid( ));
        printf("\n THE CHILD PARENT PROCESS ID IS:%d \n",getppid( ));
    }
    else
    {
        printf("\n I AM PARENT PROCESS AND MY ID IS:%d\n",getpid( ));
        printf("\n THE PARENTS PARENT PROCESS ID IS:%d\n",getppid( ));
    }
    printf("\n IT CAN BE EXECUTED TWICE");
    printf("\n");
}
```

Output:

```
THIS LINE EXECUTED TWICE  
I AM PARENT PROCESS AND MY ID IS:4513  
  
THE PARENTS PARENT PROCESS ID IS:4512  
  
IT CAN BE EXECUTED TWICE  
  
THIS LINE EXECUTED TWICE  
I AM CHILD PROCESS AND MY ID IS 4517  
  
THE CHILD PARENT PROCESS ID IS:4513  
  
IT CAN BE EXECUTED TWICE
```

Result:

Thus the experiment of system calls using fork(), execlp() and pid() functions has been studied and executed successfully