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Roll No.: 12

Panel: C, **Batch:** C1

OS Lab 4 Code:

Title: Process Management (Inter-process Communication)

```
#include <stdio.h>
```

```
#include <sys/types.h>
```

```
#include <unistd.h>
```

```
#include <string.h>
```

```
pid_t pid;
```

```
int fd[2];
```

```
int main(){
```

```
    int n;
```

```
    char s[50],c[50];
```

```
    printf("Enter message to be read: \n");
```

```
    scanf("%s",&c);
```

```
    n = pipe(fd);
```

```
    if(n == 0){
```

```
        printf("Pipe created successfully");
```

```
pid = fork();
```

```
if(pid == 0){
```

```
        printf("Executing child process %d\n",getpid());
        close(fd[1]);
        read(fd[0],s,50);
        printf("The message read from parent is %s\n",s);
    }
    else{
        printf("Executing Parent process %d\n", getpid());
        close(fd[0]);
        write(fd[1],c,50);
    }
}
else if(n < 0){
    printf("Failure\n");
}
else{
    printf("Hello!");
}

return 0;
}
```

OUTPUT:

```
11 int fd[2];
12
13
14
15 int main(){
16
17
18
19 int n;
20
21 char s[50],c[50];
22
23 printf("Enter message to be read: \n");
24
25 scanf("%s",&c);
26
27 n = pipe(fd);
28
29 if(n == 0){
30
31 printf("Pipe created successfully");
```

char *

Enter message to be read:
Devanshu Surana
Pipe created successfullyExecuting Parent process 57
Pipe created successfullyExecuting child process 61
The message read from parent is Devanshu

input