

Name: Fiza Mansoor Patel

Roll no: 191

Div.: C

PRNo: 0120190425

Batch: C3

Assignment 3

Implement a program for inter process communication using the pipe mechanism. The program should send a message to the second process. The receiving process should reverse the string.

In vi ass3.cpp

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

```
#include <stdlib.h>
```

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

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

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

```
void processA(int);
```

```
void processB(int);
```

```
void processA(int writefd)
```

```
{
```

```
    int len;
```

```
    char buff[80];
```

```
    printf("Enter a string: ");
```

```
    fgets (buff,80,stdin);
```

```
    len=strlen(buff);
```

```
    if(buff[len-1]=='\n')
```

```
    {
```

```

        len--;
    }
    write(writefd,buff,len);
}

void processB(int readfd)
{
    int n,i,j;
    char str[80],temp;
    n=read(readfd,str,80);
    str[n]='\0';
    i=0;
    j=strlen(str)-1;
    while(i<j)
    {
        temp=str[i];
        str[i]=str[j];
        str[j]=temp;
        i++;
        j--;
    }
    printf("Reversed string: %s\n",str);
}

int main(void) {
    int pipe1[2];
    pid_t childpid;
    pipe(pipe1);

```

```
childpid = fork();
if (childpid==0)
{
    close (pipe1[1]);
    processB (pipe1[0]);
}
else
{
    close (pipe1[0]);
    processA (pipe1[1]);
}
return EXIT_SUCCESS;
}
```

Output:

```
~$ vi ass3.cpp
~$ g++ ass3.cpp
~$ ./a.out
Enter a string: fiza
~$ Reversed string: azif
~$ █
```