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Statement: Inter process communication in Linux using:

A. FIFOS: Full duplex communication between two independent processes. First process accepts sentences and writes on one pipe to be read by second process and second process counts number of characters, number of words and number of lines in accepted sentences, writes this output in a text fileand writes the contents of the file on second pipe to be read by first process and displays on standard output.

Code:

```
#include<stdio.h>

#include<unistd.h>

#include<sys/stat.h>

#include<fcntl.h>

#define Max_Buff 1024


int main()

{

        int fd1,fd2,c=0;

        char * myfifo1="myfifo1";

        char * myfifo2="myfifo2";

        char buff[Max_Buff];

        char str;

        int res;

        res=mkfifo(myfifo1,0777);

        if(res==-1)

        {

                printf("\nPipe 1 not created");

                return 0;

        }

        printf("\nEnter the string\n");
```

```c
        fd1=open(myfifo1,O_WRONLY);

        while((str=getchar())!='#')

        buff[c++]=str;

        buff[c]='\0';

        write(fd1,buff,sizeof(buff));

        close(fd1);

        fd2=open(myfifo2,O_RDONLY);

        read(fd2,&buff,Max_Buff);

        printf("\nContents of files:\n %s",buff);

        close(fd2);

        unlink(myfifo2);

        return 0;

}
/*OUTPUT:

student@student-OptiPlex-390:~/38$ gcc pract7b1.c -o 7b1

student@student-OptiPlex-390:~/38$ gcc pract7b2.c -o 7b2

pract7b2.c: In function 'main':

pract7b2.c:54:2: warning: implicit declaration of function 'system' [-Wimplicit-function-declaration]

  54 |  system("cat a.txt>myfifo2");

    | ^~~~~~

student@student-OptiPlex-390:~/38$ ./7b1

Enter the string

Hello World#

Contents of files:

No. of lines are :1

No. of words are :2

No. of chars are :10

в8astudent@student-OptiPlex-390:~/38$

*/
```