

OS Lab 10

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Task 1

```
#include <stdio.h>
#include<unistd.h>
#include<string.h>
#include<fcntl.h>
#include<sys/stat.h>
#include<sys/types.h>
#define FIFO_FILE "MYFIFO"
int main(){
int fd,fd1;
mkfifo(FIFO_FILE,0666);
char readbuf1[80],readbuf2[80];
    int pipe1[2], pipe2[2];
    int returnstatus1, returnstatus2;
    int pid;
    int pipe1writemessage;
    int pipe2writemessage;
    int readmessage;
    returnstatus1 = pipe(pipe1);
    if(returnstatus1 == -1){
        printf("Unable to create pipe1");
        return 1;}
    returnstatus2 = pipe(pipe2);
    if(returnstatus2 == -1){
        printf("Unable to create pipe2");
        return 1;}
    pid = fork();
    if(pid != 0){
        close(pipe1[0]);
        close(pipe2[1]);
        printf("IN Parent Block\n");
        printf("You can type your message\n");
        while(1){
            fd=open(FIFO_FILE,O_CREAT|O_WRONLY);
            fgets(readbuf2,80,stdin);
            write(fd,readbuf2,strlen(readbuf2)+1);
            close(fd);}
        sleep(1);}
    else{
        close(pipe1[1]);
        close(pipe2[0]);
        while(1){
            fd1=open(FIFO_FILE,O_RDONLY);
            read(fd1,readbuf1,sizeof(readbuf1));
            printf("IN Childs Block\n");
            printf("Read Client Message\n %s\n",readbuf1);
            close(fd1);}}
    return 0;}
```

Output

```
(kali㉿kali)-[~/Documents/lab_10]
$ ./obj3
IN Parent Block
You can type your message
kashif here
IN Childs Block
Read Client Message
  kashif here

shiza here
IN Childs Block
Read Client Message
  shiza here

kese hen ap
IN Childs Block
Read Client Message
  kese hen ap

bilkul thik tum sunao
IN Childs Block
Read Client Message
  bilkul thik tum sunao
```