

```
// C program to implement one side of FIFO
// This side writes first, then reads
#include <stdio.h>
#include <string.h>
#include <fcntl.h>
#include <sys/stat.h>
#include <sys/types.h>
#include <unistd.h>

int main() {

    int fd;

    // FIFO file path
    char * myfifo = "/tmp/myfifo";

    // Creating the named file(FIFO)
    // mkfifo(<pathname>, <permission>)
    mkfifo(myfifo, 0666);

    char arr1[80], arr2[80];
    while (1) {
        // Open FIFO for write only
        fd = open(myfifo, O_WRONLY);

        // Take an input arr2ing from user.
        // 80 is maximum length
        fgets(arr2, 80, stdin);

        // Write the input arr2ing on FIFO
        // and close it
        write(fd, arr2, strlen(arr2)+1);
        close(fd);

        // Open FIFO for Read only
        fd = open(myfifo, O_RDONLY);

        // Read from FIFO
        read(fd, arr1, sizeof(arr1));

        // Print the read message
        printf("User2: %s", arr1);
        close(fd);
    }
    return 0;
}
```

```
// C program to implement one side of FIFO
// This side reads first, then reads
#include <stdio.h>
#include <string.h>
#include <fcntl.h>
#include <sys/stat.h>
#include <sys/types.h>
#include <unistd.h>

int main() {
    int fd1;

    // FIFO file path
    char * myfifo = "/tmp/myfifo";

    // Creating the named file(FIFO)
    // mkfifo(<pathname>,<permission>)
    mkfifo(myfifo, 0666);

    char str1[80], str2[80];
    while (1)
    {
        // First open in read only and read
        fd1 = open(myfifo,0_RDONLY);
        read(fd1, str1, 80);

        // Print the read string and close
        printf("User1: %s", str1);
        close(fd1);

        // Now open in write mode and write
        // string taken from user.
        fd1 = open(myfifo,0_WRONLY);
        fgets(str2, 80, stdin);
        write(fd1, str2, strlen(str2)+1);
        close(fd1);
    }
    return 0;
}
```

```
Someshwars-MacBook-Pro:Assignment7 someshwargaikwad$ ./A7bi
Hello
User2: Hey
Yo Boy
User2: Why are we doing this?
I dont Know
```

```
Someshwars-MacBook-Pro:Assignment7 someshwargaikwad$ ./A7bii
User1: Hello
Hey
User1: Yo Boy
Why are we doing this?
I dont Know
```

```
Someshwars-MacBook-Pro:Assignment7 someshwargaikwad$ ./A7bi
Hello
User2: Hey
Yo Boy
User2: Why are we doing this?
I dont Know
```

```
Someshwars-MacBook-Pro:Assignment7 someshwargaikwad$ ./A7bii
User1: Hello
Hey
User1: Yo Boy
Why are we doing this?
User1: I dont Know
```