1. **Develop a C program which demonstrates interprocess communication between a reader process and a writer process. Use mkfifo, open, read, write and close APIs in your program**.

**Reader Process:**

#include<fcntl.h>

#include<sys/stat.h>

#include<sys/types.h>

#include<unistd.h>

#include<stdio.h>

#define MAX\_BUF 1024

int main()

{

int fd;

/\* A temporary FIFO file is not created in reader \*/

char \*myfifo = "/tmp/myfifo";

char buf[MAX\_BUF];

/\* Open the named pipe for reading \*/

fd = open(myfifo, O\_RDONLY);

/\* Read data from the FIFO \*/

read(fd, buf, MAX\_BUF);

printf("Writer: %s\n", buf);

/\* Close the FIFO \*/

close(fd);

return 0;

}

**Writer Process:**

#include<stdio.h>

#include<fcntl.h>

#include<sys/stat.h>

#include<sys/types.h>

#include<unistd.h>

int main()

{

int fd;

char buf[1024];

/\* Create the named pipe (FIFO) \*/

char \*myfifo = "/tmp/myfifo";

mkfifo(myfifo, 0666);

printf("Run Reader process to read the FIFO File\n");

/\* Open the named pipe for writing \*/

fd = open(myfifo, O\_WRONLY);

/\* Write data to the FIFO \*/

strcpy(buf, "Hello from Writer Process");

write(fd, buf, sizeof(buf));

/\* Close the FIFO \*/

close(fd);

/\* Remove the FIFO \*/

unlink(myfifo);

return 0;

}