4. Write a C/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.

/\*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 FIFO (named pipe) \*/ char \* myfifo = "/tmp/myfifo"; mkfifo(myfifo, 0666);

printf("Run Reader process to read the FIFO File\n"); fd = open(myfifo, O\_WRONLY);

write(fd,"Hi", sizeof("Hi"));

/\* write "Hi" to the FIFO \*/ close(fd);

unlink(myfifo); /\* remove the FIFO \*/ return 0;

}

/\* 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 temp FIFO file is not created in reader \*/ char \*myfifo = "/tmp/myfifo";

char buf[MAX\_BUF];

/\* open, read, and display the message from the FIFO \*/ fd = open(myfifo, O\_RDONLY);

read(fd, buf, MAX\_BUF); printf("Writer: %s\n", buf); close(fd);

return 0;

}