2) Using TCP/IP sockets, write a client-server program to make the client send the file name and to make the server send back the contents of the requested file if present.

Server Program

```c
#include <sys/types.h>
#include <sys/sockets.h>
#include <netinet/in.h>
#include <sys/stat.h>
#include <stdlib.h>
#include <fcntl.h>
#include <stdio.h>
int main() {
int s_socket, so-c, len, fd, s = 1024;
char *buf = malloc(s);
char fname [256];
struct sockaddr_in a;
s_socket = socket (AF_INET, SOCK_STREAM, 0);
a.sin_family = AF_INET;
a.sin_addr.s_addr = INADDR_ANY;
a.sin_port = htons (6800);
bind (s_socket, (struct sockaddr*) &a, sizeof(a));
listen (s_socket, 3);
len = sizeof (struct sockaddr_in);
so_c = accept (s_socket, (struct sockaddr *) &a, &len);
printf ("The client is connected ...\n");
recv (so_c, fname, 235, 0);
if ((fd = open (fname, O_RDONLY, 0)) < 0) {
    printf ("FILE open failed !!!");
    exit (0);
```

```
}
    while (read (fd, buf , s) > 0) {
        send (so-c, buf , s, 0);
    }
    close (so-c);
    return close (s-socket);
```

Client Program

```
#include <sys/types.h>
#include <netinet/in.h>
#include <sys/stat.h>
#include <stdlib.h>
#include <fcntl.h>
#include <stdio.h>
int main() {
    int c = socket, s = 1024;
    char * buf = malloc (s);
    char fname [256];
    struct sockaddr_in addrs;
    c_socket = socket (AF-INET, SOCK-STREAM, 0);
    addrs.sin_family = AF-INET;
    addrs.sin_port = htons (6800);
    inet_pton (AF-INET, "127.0.0.1", &addrs.
    sin_addr);
    connect (c-socket, (struct sockaddr*) &addrs,
    sizeof (addrs));
    printf ("Enter file name:");
    scanf ("%s", fname);
    send (c-socket, fname, 255, 0);
    while (recv (c-socket, buf, s, 0) > 0)
    printf ("%s", buf);
```

return close (c-socket):

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OUTPUT:

SERVER

cc pc.c
./a.out
The Client is Connected ...

CLIENT

ccqp.c
./a.out
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