

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <unistd.h>
4  #include <string.h>
5  #include <sys/types.h>
6  #include <sys/socket.h>
7  #include <netinet/in.h>
8  #include <netdb.h>
9
10 void error(const char *msg)
11 {
12     perror(msg);
13     exit(0);
14 }
15
16 int main(int argc, char *argv[])
17 {
18     int sockfd, portno, n;
19     struct sockaddr_in serv_addr;
20     struct hostent *server;
21
22     char buffer[256];
23     if (argc < 3) {
24         fprintf(stderr, "usage %s hostname port\n", argv[0]);
25         exit(0);
26     }
27     portno = atoi(argv[2]);
28     sockfd = socket(AF_INET, SOCK_STREAM, 0);
29     if (sockfd < 0)
30         error("ERROR opening socket");
31     server = gethostbyname(argv[1]);
32     if (server == NULL) {
33         fprintf(stderr, "ERROR, no such host\n");
34         exit(0);
35     }
36     bzero((char *) &serv_addr, sizeof(serv_addr));
37     serv_addr.sin_family = AF_INET;
38     bcopy((char *)server->h_addr,
39         (char *)&serv_addr.sin_addr.s_addr,
40         server->h_length);
41     serv_addr.sin_port = htons(portno);
42     if (connect(sockfd, (struct sockaddr *) &serv_addr, sizeof(serv_addr)) < 0)
43         error("ERROR connecting");
44     printf("Client: ");
45     while(1)
46     {
47         bzero(buffer, 256);
48         fgets(buffer, 255, stdin);
49         n = write(sockfd, buffer, strlen(buffer));
50         if (n < 0)
51             error("ERROR writing to socket");
52         bzero(buffer, 256);
53         n = read(sockfd, buffer, 255);
54         if (n < 0)
55             error("ERROR reading from socket");
56         printf("Server : %s\n", buffer);
57         int i = strncmp("Bye", buffer, 3);
58         if(i == 0)
59             break;
60     }
61     close(sockfd);
62     return 0;
63 }
```