

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <netdb.h>

void error(char *msg)
{
    perror(msg);
    exit(0);
}

void main(int argc, char *argv[])
{
    int sockfd, portno, ret;
    struct sockaddr_in serv_addr;
    struct hostent *server;
    char buffer[256];

    if (argc < 3) {
        fprintf(stderr, "usage %s hostname port\n", argv[0]);
        exit(0);
    }
    portno = atoi(argv[2]);

    sockfd = socket(AF_INET, SOCK_STREAM, 0);
    if (sockfd < 0) error("ERROR opening socket");
    server = gethostbyname(argv[1]);
    if (server == NULL) error ("ERROR, no such host");
    bzero((char *) &serv_addr, sizeof(serv_addr));
    serv_addr.sin_family = AF_INET;
    bcopy((char *)server->h_addr,
        (char *)&serv_addr.sin_addr.s_addr, server->h_length);
    serv_addr.sin_port = htons(portno);

    if (connect(sockfd, (struct sockaddr *)&serv_addr, sizeof(serv_addr)) < 0)
        error("ERROR connecting");

    printf ("Please enter the message: ");
    scanf ("%s", buffer);
    ret = write (sockfd, buffer, strlen(buffer));
    if (ret < 0) error ("ERROR writing to socket");
    bzero (buffer, 256);
    ret = read (sockfd, buffer, 255);
    if (ret < 0) error ("ERROR reading from socket");
    printf ("%s\n", buffer);

    close (sockfd);
}
```