

```

1  /* A simple TCP client */
2  #include <stdio.h>
3  #include <netdb.h>
4  #include <sys/types.h>
5  #include <sys/socket.h>
6  #include <netinet/in.h>
7  #include <string.h> //Added string library
8  #include <strings.h> //For bzero function
9  #include <stdlib.h> //Added standard library
10 #include <unistd.h>
11 #include <signal.h>
12
13 #include "media_transfer.h"
14 #include "parser.h"
15
16 #define SERVER_TCP_PORT      (3000)
17
18 int main(int argc, char **argv)
19 {
20     sigaction(SIGPIPE, &(struct sigaction){SIG_IGN}, NULL);
21
22     int n, bytes_to_read;
23     int batch_mode = 0;
24     int sd, port;
25     struct hostent *hp;
26     struct sockaddr_in server;
27     char *host, *bp, rbuf[BUFLEN], sbuf[BUFLEN];
28
29     switch(argc) {
30     case 2:
31         host = argv[1];
32         if (strrchr(host, ':')) {
33             port = atoi(strrchr(host, ':') + 1);
34             char *opec = strrchr(host, ':');
35             *opec = 0;
36         } else port = SERVER_TCP_PORT;
37         break;
38     case 3:
39         host = argv[1];
40         if (strrchr(host, ':')) {
41             port = atoi(strrchr(host, ':') + 1);
42             char *opec = strrchr(host, ':');
43             *opec = 0;
44         } else port = SERVER_TCP_PORT;
45         batch_mode = 1;
46         break;
47     default:
48         fprintf(stderr, "Usage: %s <host>[:port] [script]\n", argv[0]);
49         exit(1);
50     }
51
52     /* Create a stream socket */
53     if ((sd = socket(AF_INET, SOCK_STREAM, 0)) == -1) {
54         fprintf(stderr, "Can't create a socket\n");
55         exit(1);
56     }
57
58     /* Find the server to connect to */
59     bzero((char *)&server, sizeof(struct sockaddr_in));
60     server.sin_family = AF_INET;
61     server.sin_port = htons(port);
62     if ((hp = gethostbyname(host)) == NULL) {
63         fprintf(stderr, "Can't get server's address\n");
64         exit(1);
65     }
66
67     printf("h_length = %d\n", hp->h_length);
68
69     bcopy(hp->h_addr_list[0], (char *)&server.sin_addr, hp->h_length);

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70
71     /* Connecting to the server */
72     if (connect(sd, (struct sockaddr *)&server, sizeof(server)) == -1) {
73         fprintf(stderr, "Can't connect\n");
74         exit(1);
75     }
76     printf("Connected: server's address is %s\n", hp->h_name);
77
78     if(batch_mode) {
79         process_batch(sd, argv[2]);
80     }
81     else {
82         char time_stamp[TIME_BUFFER_LEN];
83         get_time_spec_to_string(time_stamp, TIME_BUFFER_LEN);
84         while (1) {
85             printf("%s: TX: ", time_stamp);
86             fgets(sbuf, BUFLen, stdin);          /* get user's text */
87             if(strcmp(sbuf, "exit\n") == 0) {
88                 write(sd, sbuf, BUFLen);
89                 close(sd);
90                 break;
91             }
92             else {
93                 printf("%s: Sent Command: %s\n", time_stamp, sbuf);
94                 handle_command(sd, sbuf, BUFLen);
95             }
96         }
97     }
98     return 0;
99 }

```