

```

1  /*
2     Simple udp server
3  */
4
5  #include<stdio.h> //printf
6  #include<string.h> //memset
7  #include<stdlib.h> //exit(0);
8  #include<arpa/inet.h>
9  #include<sys/socket.h>
10
11 #define BUFLen 512 //Max length of buffer
12 #define PORT 8888 //The port on which to listen for incoming data
13
14 void die(char *s)
15 {
16     perror(s);
17     exit(1);
18 }
19
20 int main(void)
21 {
22     struct sockaddr_in si_me, si_other;
23
24     int s, i, slen = sizeof(si_other) , recv_len;
25     char buf[BUFLen];
26
27     //create a UDP socket
28     if ((s=socket(AF_INET, SOCK_DGRAM, IPPROTO_UDP)) == -1)
29     {
30         die("socket");
31     }
32
33     // zero out the structure
34     memset((char *) &si_me, 0, sizeof(si_me));
35
36     si_me.sin_family = AF_INET;
37     si_me.sin_port = htons(PORT);
38     si_me.sin_addr.s_addr = htonl(INADDR_ANY);
39
40     //bind socket to port
41     if( bind(s , (struct sockaddr*)&si_me, sizeof(si_me) ) == -1)
42     {
43         die("bind");
44     }
45
46     //keep listening for data
47     while(1)
48     {
49         printf("Waiting for data...");
50         fflush(stdout);
51
52         //try to receive some data, this is a blocking call
53         if ((recv_len = recvfrom(s, buf, BUFLen, 0, (struct sockaddr *)
&si_other, &slen)) == -1)
54         {
55             die("recvfrom()");
56         }
57         buf[recv_len-1] = '\0';
58         //print details of the client/peer and the data received
59         printf("Received packet from %s:%d\n", inet_ntoa(si_other.sin_addr),
ntohs(si_other.sin_port));
60         printf("Data: %s\n" , buf);
61
62         //now reply the client with the same data
63         if (sendto(s, buf, recv_len, 0, (struct sockaddr*) &si_other, slen) ==
-1)
64         {
65             die("sendto()");
66         }

```

```
67     }
68
69     close(s);
70     return 0;
71 }
```