

## CLIENT

```
#include <sys/socket.h>
#include <netinet/in.h>
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <unistd.h>
int sock_desc;
void sendPacket(char packet[],int i)
{
    int k,m;
    char ack[100];
    k=send(sock_desc,packet,100,0);
}
if(k==-1)
printf("Error in sending\n");
else
printf("Sending Packet %d\n",i+1);
for(;;)
{
    m=recv(sock_desc,ack,100,0);
    printf("%s\n",ack);
    if(strcmp(ack,"1")==0)
        break;
    else
    {
        k=send(sock_desc,packet,100,0);
        printf("Resending Packet %d\n",i+1);
    }
}
int main()
{
    char buf[100];
    int k;
    struct sockaddr_in client;
    char packet[3][100]={
        " iam batman","iam the saviour of gotham"," iam walter white"
    };
    sock_desc=socket(AF_INET,SOCK_STREAM,0);
    if(sock_desc==-1)
        printf("Error in socket creation");
    client.sin_family=AF_INET;
    client.sin_addr.s_addr=INADDR_ANY;
    client.sin_port=5651;
    k=connect(sock_desc,(struct sockaddr*)&client,sizeof(client));
    if(k==-1)
        printf("Error in connecting to server\n");
```

```

for(int i=0;i<3;i++)
{
sendPacket(packet[i],i);
}
}
printf("Packets transmitted successfully\n");
close(sock_desc);
return 0;

```

## SERVER

```

#include#include#include#include#include#include#include<sys/
socket.h>
<netinet/in.h>
<stdio.h>
<string.h>
<strings.h>
<stdlib.h>
<unistd.h>
int sock_desc,temp_sock_desc;
void recvPacket(int i)
{
char buf[100],ack[100];
int k;
k=recv(temp_sock_desc,buf,100,0);
if(k==-1)
printf("Error in receiving packet %d\n",i+1);
for(;;)
{
printf("Packet %d recieved or not: ",i+1);
scanf("%s",ack);
ack[strlen(ack)]='\0';
k=send(temp_sock_desc,ack,100,0);
if(strcmp(ack,"1")==0)
{
break;
}
}
else
{
k=recv(temp_sock_desc,buf,100,0);
}
}
}
int{
main()
char buf[100];
char ack[100];
int k,m;

```

```

socklen_t len;
struct sockaddr_in server, client;
sock_desc = socket(AF_INET, SOCK_STREAM, 0);
if(sock_desc == -1)
printf("Error in socket creation");
server.sin_family = AF_INET;
server.sin_addr.s_addr = INADDR_ANY;
server.sin_port = 5651;
client.sin_family = AF_INET;
client.sin_addr.s_addr = INADDR_ANY;
client.sin_port = 5656;
k = bind(sock_desc, (struct sockaddr*)&server, sizeof(server));
if(k == -1)
printf("Error in binding");
k = listen(sock_desc, 5);
}
if(k == -1)
printf("Error in listening");
len = sizeof(client);
temp_sock_desc = accept(sock_desc, (struct sockaddr*)&client, &len);
if(temp_sock_desc == -1)
printf("Error in temporary socket creation");
for(int i = 0; i < 3; i++)
{
recvPacket(i);
}
close(temp_sock_desc);
return 0;

```

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
• [karthikeyan@lenovo client]$ ./a.out
Sending Packet 1
1
Sending Packet 2
1
Sending Packet 3
0
Resending Packet 3
0
Resending Packet 3
1
Packets transmitted successfully
◦ [karthikeyan@lenovo client]$

• [karthikeyan@lenovo server]$ ./a.out
Received Packet 1: SEQ1i am the god of death
Packet 1 received or not: 1
Received Packet 2: SEQ2i am the god of thunder
Packet 2 received or not: 1
Received Packet 3: SEQ3i am the god of mischief
Packet 3 received or not: 0
Packet 3 received or not: 0
Packet 3 received or not: 1
◦ [karthikeyan@lenovo server]$

```