

```

#include<stdio.h>
#include<stdlib.h>
#include<unistd.h>
#include<string.h>
#include<arpa/inet.h>

#define PORT 5000

void main()
{
    int clientsock;
    struct sockaddr_in addr;
    char buf[1024];

    clientsock=socket(AF_INET,SOCK_STREAM,0);
    printf("Client is created succesfully\n");
    memset(&addr,'\0',sizeof(addr));
    addr.sin_family=AF_INET;
    addr.sin_port=htons(PORT);
    addr.sin_addr.s_addr=inet_addr("127.0.0.1");

    connect(clientsock,(struct sockaddr*)&addr,sizeof(addr));
    printf("Connection  successfully\n");

    while(1)
    {
        bzero(buf,1024);
        printf("Enter message\n");
        fgets(buf,sizeof(buf),stdin);
        send(clientsock,buf,strlen(buf),0);

        if(strncmp("exit",buf,4)==0)
        {
            close(clientsock);
            printf("Client  disconnected\n");
            break;
        }
    }
}

```

```

#include<stdio.h>
#include<stdlib.h>
#include<unistd.h>
#include<string.h>
#include<arpa/inet.h>
#define PORT 5000
int main()
{
    int server_sock,client_sock,n;
    struct sockaddr_in serveraddr,clientaddr;
    socklen_t addr_size;
    char buf[1024];
    server_sock=socket(AF_INET,SOCK_STREAM,0);
    printf("Server is created successfully\n");
    memset(&serveraddr,'\0',sizeof(serveraddr));
    serveraddr.sin_family=AF_INET;
    serveraddr.sin_port=htons(PORT);
    serveraddr.sin_addr.s_addr=inet_addr("127.0.0.1");

    n=bind(server_sock,(struct sockaddr*)&serveraddr,sizeof(serveraddr));
    printf("Bind to Port number %d\n",PORT);

    listen(server_sock,5);
    printf("Listening....\n");
    addr_size=sizeof(clientaddr);
    client_sock=accept(server_sock,(struct sockaddr*)&clientaddr,&addr_size);
    printf("Client Connected\n");
    while(1)
    {
        bzero(buf,1024);
        recv(client_sock,buf,sizeof(buf),0);
        printf("From Client:%s",buf);

        if(strncmp("exit",buf,4)==0)
        {
            close(client_sock);
            printf("Server is disconnected\n");
            break;
        }
    }
    return 0;
}

```

```
21BR14256@administrator-PowerEdge-R820:~/networkLab$ ./tcpserver
```

```
Server is created successfully
```

```
Bind to Port number 5000
```

```
Listening....
```

```
Client Connected
```

```
From Client:Hello
```

```
From Client:hellloooo
```

```
From Client:good morning
```

```
Server is disconnected
```

```
21BR14256@administrator-PowerEdge-R820:~/networkLab$ ./tcpclient
```

```
Client is created successfully
```

```
Connection successfully
```

```
Enter message
```

```
Hello
```

```
Enter message
```

```
hellloooo
```

```
Enter message
```

```
good morning
```

```
Enter message
```

```
exit
```

```
Client disconnected
```

```

#include<stdio.h>
#include<stdlib.h>
#include<unistd.h>
#include<string.h>
#include<arpa/inet.h>

#define PORT 5000

void main()
{
    int clientsock;
    struct sockaddr_in addr;
    char buf[1024];

    clientsock=socket(AF_INET,SOCK_STREAM,0);
    printf("Client is created succesfully\n");
    memset(&addr,'\0',sizeof(addr));
    addr.sin_family=AF_INET;
    addr.sin_port=htons(PORT);
    addr.sin_addr.s_addr=inet_addr("127.0.0.1");

    connect(clientsock,(struct sockaddr*)&addr,sizeof(addr));
    printf("Connection successfully\n");

    while(1)
    {
        bzero(buf,1024);
        printf("Enter message\n");
        fgets(buf,sizeof(buf),stdin);
        send(clientsock,buf,strlen(buf),0);

        if(strncmp("exit",buf,4)==0)
        {
            close(clientsock);
            printf("Client disconnected\n");
            break;
        }
    }
}

```

```

#include<stdio.h>
#include<stdlib.h>
#include<unistd.h>
#include<string.h>
#include<arpa/inet.h>
#define PORT 5000
int main()
{
    int server_sock,client_sock,n;
    struct sockaddr_in serveraddr,clientaddr;
    socklen_t addr_size;
    char buf[1024];
    server_sock=socket(AF_INET,SOCK_STREAM,0);
    printf("Server is created successfully\n");
    memset(&serveraddr,'\0',sizeof(serveraddr));
    serveraddr.sin_family=AF_INET;
    serveraddr.sin_port=htons(PORT);
    serveraddr.sin_addr.s_addr=inet_addr("127.0.0.1");

    n=bind(server_sock,(struct sockaddr*)&serveraddr,sizeof(serveraddr));
    printf("Bind to Port number %d\n",PORT);

    listen(server_sock,5);
    printf("Listening....\n");
    addr_size=sizeof(clientaddr);
    client_sock=accept(server_sock,(struct sockaddr*)&clientaddr,&addr_size);
    printf("Client Connected\n");
    while(1)
    {
        bzero(buf,1024);
        recv(client_sock,buf,sizeof(buf),0);
        printf("From Client:%s",buf);

        if(strncmp("exit",buf,4)==0)
        {
            close(client_sock);
            printf("Client disconnected\n");
            break;
        }
    }
    return 0;
}

```

```
22BR14483@administrator-PowerEdge-R820:~/networkLab$ ./tcpserver
Server is created successfully
Bind to Port number 5000
Listening....
Client Connected
From Client:Hello
From Client:msg from client
Client disconnected
```

```
22BR14483@administrator-PowerEdge-R820:~/networkLab$ ./tcpclient
Client is created successfully
Connection successfully
Enter message
Hello
Enter message
msg from client
Enter message
exit
Client disconnected
```

```
22BR14486@administrator-PowerEdge-R820:~/networkLab$ ./tcpserver
Server is created successfully
Bind to Port number 4000
Listening....
Client Connected
From Client:Hello sree
From Client:22br14486
server is disconnected
```

```
22BR14486@administrator-PowerEdge-R820:~/networkLab$ ./tcpclient
Client is created successfully
Connection successfully
Enter message
Hello sree
Enter message
22br14486
Enter message
exit
Client is disconnected
```

```

#include<stdio.h>
#include<stdlib.h>
#include<unistd.h>
#include<string.h>
#include<arpa/inet.h>

#define PORT 4000

void main()
{
    int clientsock;
    struct sockaddr_in addr;
    char buf[1024];

    clientsock=socket(AF_INET,SOCK_STREAM,0);
    printf("Client is created succesfully\n");
    memset(&addr,'\0',sizeof(addr));
    addr.sin_family=AF_INET;
    addr.sin_port=htons(PORT);
    addr.sin_addr.s_addr=inet_addr("127.0.0.1");

    connect(clientsock,(struct sockaddr*)&addr,sizeof(addr));
    printf("Connection successfully\n");

    while(1)
    {
        bzero(buf,1024);
        printf("Enter message\n");
        fgets(buf,sizeof(buf),stdin);
        send(clientsock,buf,strlen(buf),0);

        if(strncmp("exit",buf,4)==0)
        {
            close(clientsock);
            printf("Client is disconnected\n");
            break;
        }
    }
}

```

```

#include<stdio.h>
#include<stdlib.h>
#include<unistd.h>
#include<string.h>
#include<arpa/inet.h>
#define PORT 4000
int main()
{
    int server_sock,client_sock,n;
    struct sockaddr_in serveraddr,clientaddr;
    socklen_t addr_size;
    char buf[1024];
    server_sock=socket(AF_INET,SOCK_STREAM,0);
    printf("Server is created successfully\n");
    memset(&serveraddr,'\0',sizeof(serveraddr));
    serveraddr.sin_family=AF_INET;
    serveraddr.sin_port=htons(PORT);
    serveraddr.sin_addr.s_addr=inet_addr("127.0.0.1");

    n=bind(server_sock,(struct sockaddr*)&serveraddr,sizeof(serveraddr));
    printf("Bind to Port number %d\n",PORT);

    listen(server_sock,5);
    printf("Listening....\n");
    addr_size=sizeof(clientaddr);
    client_sock=accept(server_sock,(struct sockaddr*)&clientaddr,&addr_size);
    printf("Client Connected\n");
    while(1)
    {
        bzero(buf,1024);
        recv(client_sock,buf,sizeof(buf),0);
        printf("From Client:%s",buf);

        if(strncmp("exit",buf,4)==0)
        {
            close(client_sock);
            printf("server is disconnected\n");
            break;
        }
    }
    return 0;
}

```