```c
//B20CS1130
//Experiment 6
//UDP server

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

void main(){
        printf("Server side\n");
        char buffer[50];
        int sockfd;
        struct sockaddr_in addr;

        addr.sin_family=AF_INET;
        addr.sin_addr.s_addr=INADDR_ANY;
        addr.sin_port=3008;
        int s=sizeof(struct sockaddr_in);
        sockfd=socket(AF_INET,SOCK_DGRAM,0);

        bind(sockfd,(struct sockaddr*)&addr,sizeof(addr));

        listen(sockfd,5);

        do{
                printf("Connection established\n");
                printf("Receiving message from client\n");
                recvfrom(sockfd,buffer,sizeof(buffer),0,(struct sockaddr*)&addr,&s);
                printf("%s",buffer);
                printf("\nEnter message:");
                scanf("%s",buffer);
                sendto(sockfd,buffer,sizeof(buffer),0,(struct sockaddr*)&addr,s);
        }while(strcmp(buffer,"stop")!=0);
        close(sockfd);
}

/*
OUTPUT
s6cs130@comp62:~$ gcc 6.udpserver.c
s6cs130@comp62:~$ ./a.out
```

Server side
Connection established
Receiving message from client
hi
Enter message:hello
Connection established
Receiving message from client
hi
Enter message:stop
*/

//Experiment 6
//UDP client

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

void main(){
        printf("Client Side\n");
        char buffer[50];
        int sockfd;

        sockfd=socket(AF_INET,SOCK_DGRAM,0);
        struct sockaddr_in addr;

        addr.sin_family=AF_INET;
        addr.sin_addr.s_addr=INADDR_ANY;
        addr.sin_port=3008;

        int s=sizeof(struct sockaddr_in);

        connect(sockfd,(struct sockaddr*)&addr,sizeof(addr));

        do{
                printf("Send message to server: ");
                scanf("%s",buffer);
                sendto(sockfd,buffer,sizeof(buffer),0,(struct sockaddr*)&addr,s);
                recvfrom(sockfd,buffer,sizeof(buffer),0,(struct sockaddr*)&addr,(&s));
                printf("Received from server: %s\n",buffer);
```

```
            }while(strcmp(buffer,"stop")!=0);
            close(sockfd);
}

/*
OUTPUT
s6cs130@comp62:~$ gcc 6.udpclient.c
s6cs130@comp62:~$ ./a.out
Client Side
Send message to server: hi
Received from server: hello
Send message to server: hi
Received form server: stop
*/
```