Subject: UDP QUESTION2
SERVER

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

int main()
{
    int s,r,recb,sntb,x;
    int ca;
    printf("INPUT port number: ");
    scanf("%d", &x);
    socklen_t len;
    struct sockaddr_in server,client;
    char buff[50];

    s=socket(AF_INET,SOCK_DGRAM,0);
    if(s==-1)
    {
        printf("\nSocket creation error.");
        exit(0);
    }
    printf("\nSocket created.");

    server.sin_family=AF_INET;
    server.sin_port=htons(x);
    server.sin_addr.s_addr=htonl(INADDR_ANY);
    len=sizeof(client);
    ca=sizeof(client);

    r=bind(s,(struct sockaddr*)&server,sizeof(server));
    if(r==-1)
        {
        printf("\nBinding error.");
        exit(0);
    }
    printf("\nSocket binded.");

while(1){

    recb=recvfrom(s,buff,sizeof(buff),0,(struct sockaddr*)&client,&ca);
    if(recb==-1)
    {
```

```c
            printf("\nMessage Recieving Failed");
            close(s);
            exit(0);
        }

        printf("\nMessage Recieved: ");
        printf("%s", buff);

        if(!strcmp(buff,"stop"))
            break;

        printf("\n\n");
        printf("Type Message: ");
        scanf("%s", buff);

        sntb=sendto(s,buff,sizeof(buff),0,(struct sockaddr*)&client,len);
        if(sntb==-1)
        {
            printf("\nMessage Sending Failed");
            close(s);
            exit(0);
        }

        if(!strcmp(buff,"stop"))
            break;

    }
        close(s);
}
```

CLIENT

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

int main()
{
    int s,r,recb,sntb,x;
    int sa;
```

```c
    socklen_t len;
    printf("INPUT port number: ");
    scanf("%d", &x);
    struct sockaddr_in server,client;
    char buff[50];
    s=socket(AF_INET,SOCK_DGRAM,0);
    if(s==-1)
    {
        printf("\nSocket creation error.");
        exit(0);
    }
    printf("\nSocket created.");
    server.sin_family=AF_INET;
    server.sin_port=htons(x);
    server.sin_addr.s_addr=inet_addr("127.0.0.1");
    sa=sizeof(server);
    len=sizeof(server);

while(1){

    printf("\n\n");
    printf("Type Message: ");
    scanf("%s", buff);

    sntb=sendto(s,buff,sizeof(buff),0,(struct sockaddr *)&server, len);
    if(sntb==-1)
    {
        close(s);
        printf("\nMessage sending Failed");
        exit(0);
    }
    if(!strcmp(buff,"stop"))
        break;

    recb=recvfrom(s,buff,sizeof(buff),0,(struct sockaddr *)&server,&sa);
    if(recb==-1)
    {
        printf("\nMessage Recieving Failed");
        close(s);
        exit(0);
    }

    printf("\nMessage Recieved: ");
    printf("%s", buff);

    if(!strcmp(buff,"stop"))
        break;
    }
```

```
    close(s);

}
```