

## 6. Write an example to demonstrate UDP server client program

Server:

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

int main(){
    struct sockaddr_in serv_addr,cli_addr;

    int cliFd,servFd;
    char *msg = "Hello from server";
    char buffer[1024]={0};

    servFd = socket(AF_INET,SOCK_DGRAM,0);

    serv_addr.sin_family = AF_INET;
    serv_addr.sin_port = htons(8080);
    serv_addr.sin_addr.s_addr = htonl(INADDR_ANY);

    bind(servFd, (struct sockaddr*)&serv_addr,sizeof(serv_addr));

    int len = sizeof(cli_addr);
    int n = recvfrom(servFd,buffer,sizeof(buffer),0,(struct
sockaddr*)&cli_addr,&len);
    buffer[n]='\0';

    printf("Received Msg: %s\n",buffer);

}
```

Output:

```
aswin@EURLTP-379:/mnt/c/Users/Aswin/Documents$ gcc udp_server.c -o udp_server
aswin@EURLTP-379:/mnt/c/Users/Aswin/Documents$ ./udp_server
Received Msg: Hello from client
aswin@EURLTP-379:/mnt/c/Users/Aswin/Documents$
```

Client:

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

int main(){
    struct sockaddr_in serv_addr,cli_addr;

    int servFd,cliFd;
    char* msg = "Hello from client";

    cliFd = socket(AF_INET,SOCK_DGRAM,0);

    serv_addr.sin_family = AF_INET;
    serv_addr.sin_port = htons(8080);
    serv_addr.sin_addr.s_addr = inet_addr("127.0.0.1");

    sendto(cliFd,msg,strlen(msg),0,(struct
sockaddr*)&serv_addr,sizeof(serv_addr));
    printf("msg sent successfully\n");
}
```

Output:

```
aswin@EURLTP-379:/mnt/c/Users/Aswin/Documents$ gcc udp_client.c -o udp_client
aswin@EURLTP-379:/mnt/c/Users/Aswin/Documents$ ./udp_client
msg sent successfully
aswin@EURLTP-379:/mnt/c/Users/Aswin/Documents$
```