



CN LAB-11.8.21

NAME: Ankit Raj

ROLL NO: 1906534

1. IMPLEMENT UPD SOCKET TO SEND A MESSAGE FROM CLIENT AND DISPLAY IT IN SERVER (MESSAGE WILL BE YOUR NAME WITH ROLL NUMBER)

Server.c

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <errno.h>
#include <string.h>
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <arpa/inet.h>
#define MYPOR 4952 // the port users will be connecting to
#define MAXBUFL 200
int main()
{
    int sockfd,x_534;
    struct sockaddr_in my_addr; // my address information
    struct sockaddr_in their_addr; // connector's address information
    socklen_t addr_len;
    int numbytes;
    char buf[MAXBUFL];
    if ((sockfd = socket(AF_INET, SOCK_DGRAM, 0)) == -1) {
        perror("socket");
        exit(1);
    }
    my_addr.sin_family = AF_INET; // host byte order
    my_addr.sin_port = htons(MYPOR); // short, network byte order
    my_addr.sin_addr.s_addr = INADDR_ANY; // automatically fill with my IP
    //memset(my_addr.sin_zero, '\0', sizeof my_addr.sin_zero);
    if (bind(sockfd, (struct sockaddr *)&my_addr, sizeof my_addr) == -1) {
        perror("bind");
        exit(1);
    }
    addr_len = sizeof their_addr;
    recvfrom(sockfd, &x_534, sizeof(x_534), 0,
        (struct sockaddr *)&their_addr, &addr_len);
    recvfrom(sockfd, buf, sizeof(buf), 0,
        (struct sockaddr *)&their_addr, &addr_len);
    //buf[numbytes] = '\0';
    printf("%s %d",buf,x_534);
    close(sockfd);
    return 0;
}
```

Client.c

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <errno.h>
#include <string.h>
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <arpa/inet.h>
#include <netdb.h>
#define SERVERPORT 4952 // the port users will be connecting to
int main()
```

```

{
int sockfd,x_534;
struct sockaddr_in their_addr; // connector's address information
//struct hostent *he;
int numbytes;
char arg[30];
if ((sockfd = socket(AF_INET, SOCK_DGRAM, 0)) == -1) {
perror("socket");
exit(1);
}
their_addr.sin_family = AF_INET; // host byte order
their_addr.sin_port = htons(SERVERPORT); // short, network byte order
their_addr.sin_addr.s_addr = inet_addr("127.0.0.1");
//memset(their_addr.sin_zero, '\0', sizeof their_addr.sin_zero);
printf("Enter roll no\n");
scanf("%d",&x_534);
sendto(sockfd, &x_534, sizeof(x_534), 0,
(struct sockaddr *)&their_addr, sizeof their_addr);
printf("\nEnter name\n");
scanf("%s",arg);
sendto(sockfd, arg, strlen(arg), 0,
(struct sockaddr *)&their_addr, sizeof their_addr);
printf("sent");
close(sockfd);
return 0;
}

```

OUTPUT:

```

kiit@kiit-VirtualBox: ~/1906534/CN
File Edit View Search Terminal Help
kiit@kiit-VirtualBox:~/1906534/CN$ ./server
ankit 534kiit@kiit-VirtualBox:~/1906534/CN$

kiit@kiit-VirtualBox: ~/1906534/CN
File Edit View Search Terminal Help
kiit@kiit-VirtualBox:~/1906534/CN$ ./client
Enter roll no
534

Enter name
ankit
sentkiit@kiit-VirtualBox:~/1906534/CN$

```