Name : Sabarivasan V

Class : CSE - B

Reg No : 205001085

Objective :

To be proficient in writing client server connectivity using socket programming in C and extending the above program to send replies back from server to client.

Server code :

```
#include <netinet/in.h> //structure for storing address information
#include <stdio.h>
#include <stdlib.h>
#include <sys/socket.h> //for socket APIs
#include <sys/types.h>

int main(int argc, char const* argv[])
{

    // create server socket similar to what was done in
    // client program
    int servSockD = socket(AF_INET, SOCK_STREAM, 0);
```

```
// string store data to send to client
//char message[20];
char serMsg[255] ;
printf("Enter message for client : ");
scanf("%s",serMsg);

//strcpy();

// define server address
struct sockaddr_in servAddr;

servAddr.sin_family = AF_INET;
servAddr.sin_port = htons(9001);
servAddr.sin_addr.s_addr = INADDR_ANY;

// bind socket to the specified IP and port
bind(servSockD, (struct sockaddr*)&servAddr,
    sizeof(servAddr));

// listen for connections
```

```
    listen(servSockD, 1);

    // integer to hold client socket.
    int clientSocket = accept(servSockD, NULL, NULL);

    // send's messages to client socket
    send(clientSocket, serMsg, sizeof(serMsg), 0);

    return 0;
}
```

Client Code :

```
#include <netinet/in.h> //structure for storing address information
#include <stdio.h>
#include <stdlib.h>
#include <sys/socket.h> //for socket APIs
#include <sys/types.h>

int main(int argc, char const* argv[])
{
```

```
int sockD = socket(AF_INET, SOCK_STREAM, 0);

struct sockaddr_in servAddr;

servAddr.sin_family = AF_INET;
servAddr.sin_port
    = htons(9001); // use some unused port number
servAddr.sin_addr.s_addr = INADDR_ANY;

int connectStatus
    = connect(sockD, (struct sockaddr*)&servAddr,
                sizeof(servAddr));

if (connectStatus == -1) {
    printf("Error...\n");
}

else {
    char strData[255];

    recv(sockD, strData, sizeof(strData), 0);
```

```
        printf("Message: %s\n", strData);
    }

    return 0;
}
```

Output :