Lab Ex.3 - (Client / Server communication using Socket Functions) Experiment

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SERVER CODE:

```c
#include<stdio.h>

#include<sys/types.h>

#include<sys/socket.h>

#include<netinet/in.h>


int main()

{

    char serv_mess[256] = "You have reached the server";

    int server_socket;

    server_socket = socket(AF_INET,SOCK_STREAM,0);

    //Define The Server  Address

    struct sockaddr_in server_address;

    server_address.sin_family=AF_INET;

    server_address.sin_port=htons(9002);

    server_address.sin_addr.s_addr=INADDR_ANY;

    //Bind the socket to our specified port  and IP address

    bind(server_socket,(struct sockaddr*)&server_address,sizeof(server_address));

    listen(server_socket,5);

    int client_socket;
```

client_socket=accept(server_socket,NULL,NULL);
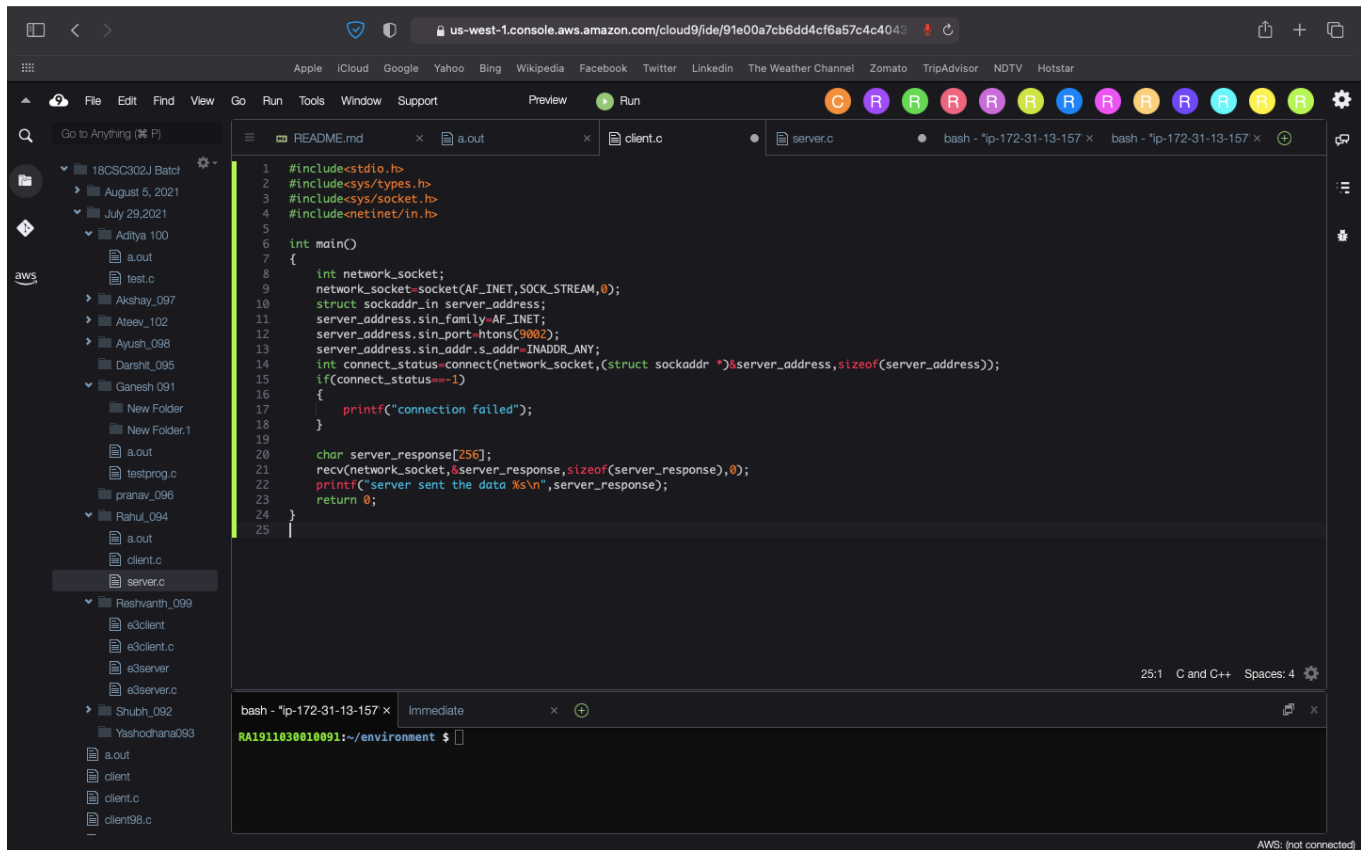
//Send the message

send(client_socket,server_mess,sizeof(server_mess),0);

return 0;

}

CLIENT CODE:

#include<stdio.h>

#include<sys/types.h>

#include<sys/socket.h>

#include<netinet/in.h>

int main()

{

```c
int network_socket;

network_socket=socket(AF_INET,SOCK_STREAM,0);

struct sockaddr_in server_address;

server_address.sin_family=AF_INET;

server_address.sin_port=htons(9002);

server_address.sin_addr.s_addr=INADDR_ANY;

int connect_status=connect(network_socket,(struct sockaddr
*)&server_address,sizeof(server_address));

if(connect_status==-1)

{

    printf("connection failed");

}


char server_response[256];

recv(network_socket,&server_response,sizeof(server_response),0);

printf("server sent the data %s\n",server_response);

return 0;

}
```

```
RA1911030010091:~/environment $ vi client.c
RA1911030010091:~/environment $ cc -o client client.c
RA1911030010091:~/environment $ cc client.c
RA1911030010091:~/environment $ ./a.out
server sent the data You have reached the server
RA1911030010091:~/environment $
```

```
RA1911030010091:~/environment $
```