POST LAB

Server-Side Implementation

```
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <stdio.h>
#include <unistd.h>
#include <arpa/inet.h>

int main() {
    int server_socket;
    server_socket = socket(AF_INET, SOCK_DGRAM, 0);
    socklen_t addr_len = sizeof(struct sockaddr_in);

    struct sockaddr_in my_addr, client_addr;
    my_addr.sin_family = AF_INET;
    my_addr.sin_port = htons(8085);
    my_addr.sin_addr.s_addr = inet_addr("127.0.0.1");


    int success = bind(server_socket, (struct sockaddr*)&my_addr,
sizeof(my_addr));
    if(success == 0){
        printf("%s\n", "Successfully Binded");
    }
    else if(success == -1){
        printf("%s\n", "Not Successfully Binded");
        return -1;
    }
```

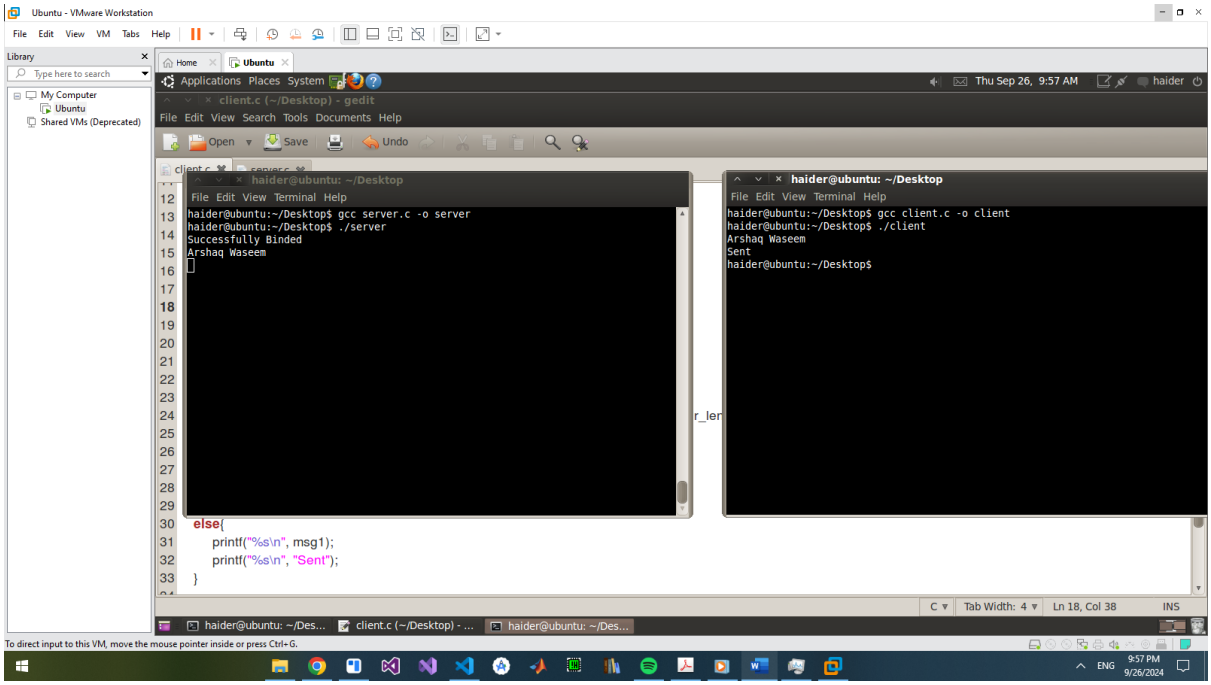
```
    int i = 0;
    while (i < 2) {

        char *msg = "connected";

        char msg1[100];
        int success = recvfrom(server_socket, msg1, 100, 0, (struct
sockaddr*)&client_addr, &addr_len);

        printf("%s\n", msg1);
        ++i;
    }

    return 0;
}
```

Client-Side Implementation

```
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <stdio.h>
#include <unistd.h>
#include <arpa/inet.h>

int main() {
    int network_socket;
    network_socket = socket(AF_INET, SOCK_DGRAM, 0);

    socklen_t addr_len = sizeof(struct sockaddr_in);
```

```
    struct sockaddr_in server_addr;
    server_addr.sin_family = AF_INET;
    server_addr.sin_port = htons(8085);
    server_addr.sin_addr.s_addr = inet_addr("127.0.0.1");

    char *msg1 = "Arshaq Waseem";

    int a = sendto(network_socket, msg1, 100, 0,  (struct
sockaddr*)&server_addr, addr_len);

    if(a == -1){
         printf("%s\n", "Not Sent");
         return -1;
    }
    else{
         printf("%s\n", msg1);
         printf("%s\n", "Sent");
    }

    close(network_socket);  // Close the socket when done

    return 0;
}
```

Output:


Ubuntu - VMware Workstation
client.c (~/Desktop) - gedit
haider@ubuntu: ~/Desktop
haider@ubuntu:~/Desktop$ gcc server.c -o server
haider@ubuntu:~/Desktop$ ./server
Successfully Binded
Arshaq Waseem
haider@ubuntu: ~/Desktop
haider@ubuntu:~/Desktop$ gcc client.c -o client
haider@ubuntu:~/Desktop$ ./client
Arshaq Waseem
Sent
haider@ubuntu:~/Desktop$
else{
printf("%s\n", msg1);
printf("%s\n", "Sent");
}