

## UDP

### Server

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

#define PORT 8080

int main() {
    int sockfd;
    char msg[1024];
    char *hello = "Hello from server";
    struct sockaddr_in servaddr, cliaddr;

    sockfd = socket(AF_INET, SOCK_DGRAM, 0);

    servaddr.sin_family = AF_INET;
    servaddr.sin_addr.s_addr = INADDR_ANY;
    servaddr.sin_port = htons(PORT);

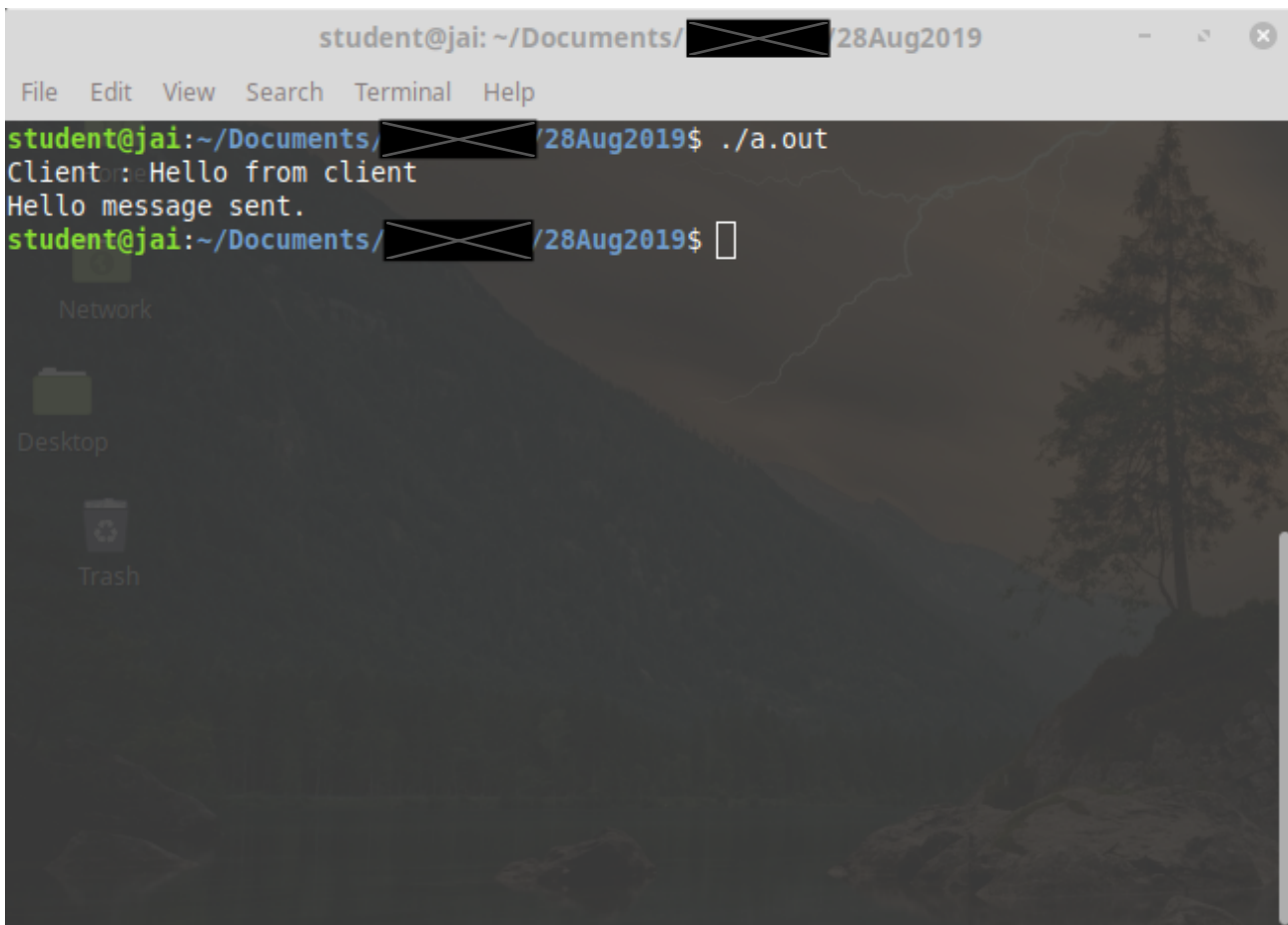
    bind(sockfd, (const struct sockaddr *)&servaddr, sizeof(servaddr));

    int len, n;
    n = recvfrom(sockfd, (char *)msg, 1024, MSG_WAITALL, ( struct sockaddr *) &cliaddr,
    &len);
    msg[n] = '\0';
    printf("Client : %s\n", msg);
    sendto(sockfd, (const char *)hello, strlen(hello), MSG_CONFIRM, (const struct sockaddr
    *) &cliaddr, len);
    printf("Hello message sent.\n");

    return 0;
}
```

### Client

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <string.h>
```



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

```
#define PORT 8080
```

```
int main() {
    int sockfd;
    char msg[1024];
    char *hello = "Hello from client";
    struct sockaddr_in servaddr;

    sockfd = socket(AF_INET, SOCK_DGRAM, 0);

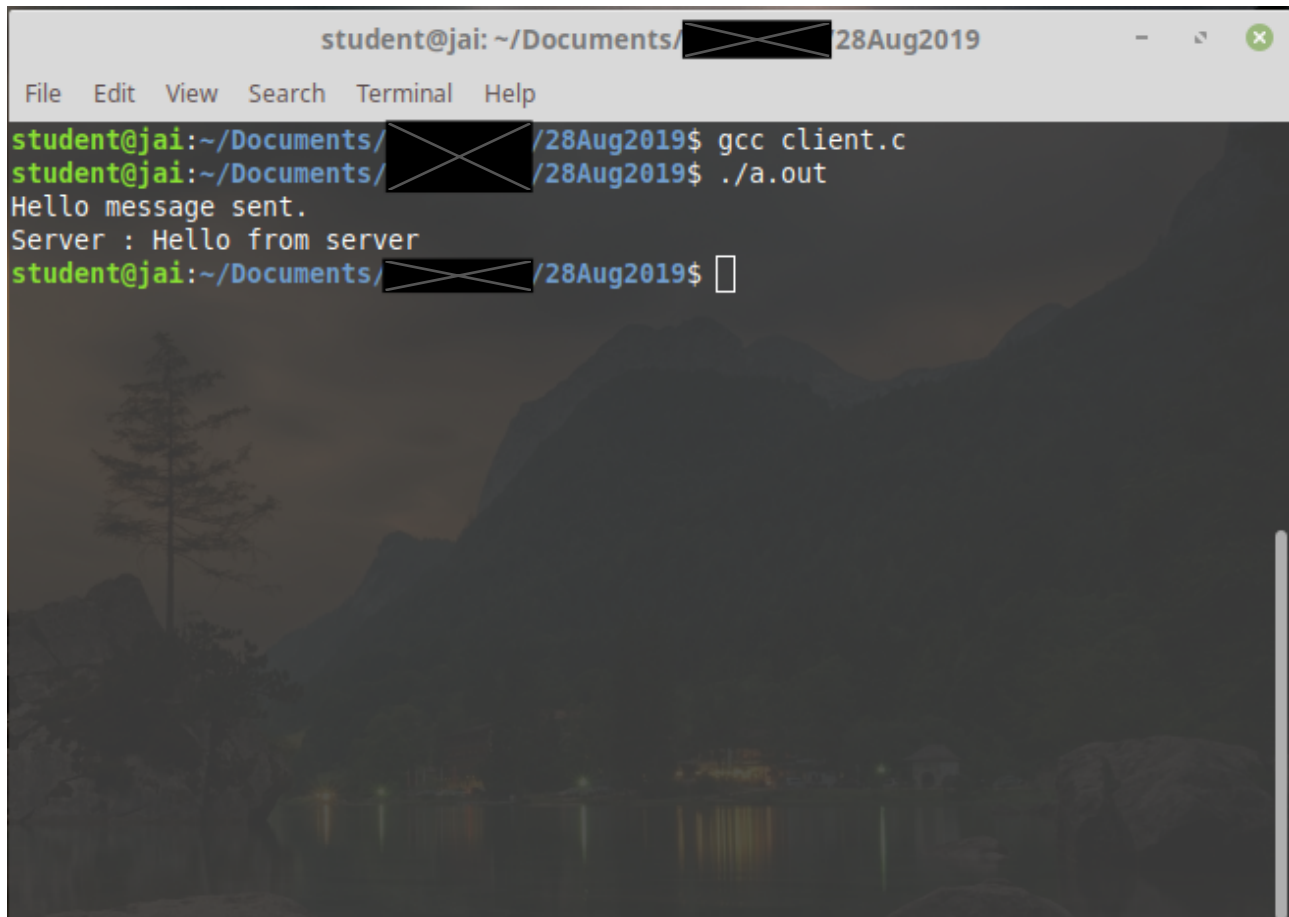
    servaddr.sin_family = AF_INET;
    servaddr.sin_port = htons(PORT);
    servaddr.sin_addr.s_addr = INADDR_ANY;

    int len, n;

    sendto(sockfd, (const char *)hello, strlen(hello), MSG_CONFIRM, (const struct sockaddr
*) &servaddr,
           sizeof(servaddr));
    printf("Hello message sent.\n");

    n = recvfrom(sockfd, (char *)msg, 1024, MSG_WAITALL, (struct sockaddr *) &servaddr,
&len);
```

```
msg[n] = '\0';  
printf("Server : %s\n", msg);  
  
close(sockfd);  
return 0;  
}
```



```
student@jai: ~/Documents/[redacted] 28Aug2019  
File Edit View Search Terminal Help  
student@jai:~/Documents/[redacted]/28Aug2019$ gcc client.c  
student@jai:~/Documents/[redacted]/28Aug2019$ ./a.out  
Hello message sent.  
Server : Hello from server  
student@jai:~/Documents/[redacted]/28Aug2019$
```