

nikhil@nikhil: ~/Desktop/YT

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nikhil@nikhil:~/Desktop/YT\$ gcc server.c -o server

nikhil@nikhil:~/Desktop/YT\$./server

[+]TCP server socket created.

[+]Bind to the port number: 5566

Listening...

[+]Client connected.

Client: HELLO, THIS IS CLIENT.

Server: HI, THIS IS SERVER. HAVE A NICE DAY!!!

[+]Client disconnected.

[+]Client connected.

Client: HELLO, THIS IS CLIENT.

Server: HI, THIS IS SERVER. HAVE A NICE DAY!!!

[+]Client disconnected.

[+]Client connected.

Client: HELLO, THIS IS CLIENT.

Server: HI, THIS IS SERVER. HAVE A NICE DAY!!!

[+]Client disconnected.

```

#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <unistd.h>
#include <arpa/inet.h>

int main(){

    char *ip = "127.0.0.1";
    int port = 5566;

    int sock;
    struct sockaddr_in addr;
    socklen_t addr_size;
    char buffer[1024];
    int n;

    sock = socket(AF_INET, SOCK_STREAM, 0);
    if (sock < 0){
        perror("[-]Socket error");
        exit(1);
    }
    printf("[+]TCP server socket created.\n");

    memset(&addr, '\0', sizeof(addr));
    addr.sin_family = AF_INET;
    addr.sin_port = port;
    addr.sin_addr.s_addr = inet_addr(ip);

    connect(sock, (struct sockaddr*)&addr, sizeof(addr));
    printf("Connected to the server.\n");

    bzero(buffer, 1024);
    strcpy(buffer, "HELLO, THIS IS CLIENT.");
    printf("Client: %s\n", buffer);
    send(sock, buffer, strlen(buffer), 0);

    bzero(buffer, 1024);
    recv(sock, buffer, sizeof(buffer), 0);
    printf("Server: %s\n", buffer);

    close(sock);
    printf("Disconnected from the server.\n");

    return 0;
}

```

```

#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <unistd.h>
#include <arpa/inet.h>

int main(){

    char *ip = "127.0.0.1";
    int port = 5566;

    int server_sock, client_sock;
    struct sockaddr_in server_addr, client_addr;
    socklen_t addr_size;
    char buffer[1024];
    int n;

    server_sock = socket(AF_INET, SOCK_STREAM, 0);
    if (server_sock < 0){
        perror("[-]Socket error");
        exit(1);
    }
    printf("[+]TCP server socket created.\n");

    memset(&server_addr, '\0', sizeof(server_addr));
    server_addr.sin_family = AF_INET;
    server_addr.sin_port = port;
    server_addr.sin_addr.s_addr = inet_addr(ip);

    n = bind(server_sock, (struct sockaddr*)&server_addr, sizeof(server_addr));
    if (n < 0){
        perror("[-]Bind error");
        exit(1);
    }
    printf("[+]Bind to the port number: %d\n", port);

    listen(server_sock, 5);
    printf("Listening...\n");

    while(1){
        addr_size = sizeof(client_addr);
        client_sock = accept(server_sock, (struct sockaddr*)&client_addr, &addr_size);
        printf("[+]Client connected.\n");

        bzero(buffer, 1024);
        recv(client_sock, buffer, sizeof(buffer), 0);
        printf("Client: %s\n", buffer);

        bzero(buffer, 1024);
        strcpy(buffer, "HI, THIS IS SERVER. HAVE A NICE DAY!!!");
        printf("Server: %s\n", buffer);
        send(client_sock, buffer, strlen(buffer), 0);

        close(client_sock);
        printf("[+]Client disconnected.\n\n");
    }
}

```

```
    return 0;  
}
```

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