

# TCP-SERVER

## PROGRAM

```
#include <stdio.h>
#include <netdb.h>
#include <netinet/in.h>
#include <stdlib.h>
#include <string.h>
#include <sys/socket.h>
#include <sys/types.h>
#include <unistd.h>
#define MAX 80
#define PORT 8080
#define SA struct sockaddr
void func(int connfd)
{
    char buff[MAX];
    int n;
    for (;;) {
        bzero(buff, MAX);
        read(connfd, buff, sizeof(buff));
        printf("From client: %s\t To client : ", buff);
        bzero(buff, MAX);
        n = 0;
        while ((buff[n++] = getchar()) != '\n')
            ;
        write(connfd, buff, sizeof(buff));
        if (strncmp("exit", buff, 4) == 0) {
            printf("Server Exit...\n");
            break;
        }
    }
}

int main()
{
    int sockfd, connfd, len;
    struct sockaddr_in servaddr, cli;

    sockfd = socket(AF_INET, SOCK_STREAM, 0);
    if (sockfd == -1) {
        printf("socket creation failed...\n");
        exit(0);
    }
    else
        printf("Socket successfully created..\n");
    bzero(&servaddr, sizeof(servaddr));

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

```
if ((bind(sockfd, (SA*)&servaddr, sizeof(servaddr))) != 0) {
printf("socket bind failed...\n");
exit(0);
}
else
printf("Socket successfully binded..\n");


if ((listen(sockfd, 5)) != 0) {
printf("Listen failed...\n");
exit(0);
}
else
printf("Server listening..\n");
len = sizeof(cli);

connfd = accept(sockfd, (SA*)&cli, &len);
if (connfd < 0) {
printf("server accept failed...\n");
exit(0);
}
else
printf("server accept the client...\n");

func(connfd);

close(sockfd);
}
```

## OUTPUT



```
csea1@sjcet-H81M-DS2:~/liya$ gcc server1.c
csea1@sjcet-H81M-DS2:~/liya$ ./a.out
Socket successfully created..
Socket successfully binded..
Server listening..
server accept the client...
From client: liya
        To client : tony
From client: hello
        To client : hai
```