

3ASERVER

```
#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); }
```

3A CLIENT

```
#include <arpa/inet.h>
#include <netdb.h>
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <strings.h>
#include <sys/socket.h>
#include <unistd.h>
#define MAX 80
#define PORT 8080
#define SA struct sockaddr

void func(int sockfd)
{ char buff[MAX]; int n;
for (;;) { bzero(buff, sizeof(buff));
printf("Enter the string : "); n = 0;
while ((buff[n++] = getchar()) != '\n')
write(sockfd, buff, sizeof(buff));
bzero(buff, sizeof(buff));
read(sockfd, buff, sizeof(buff));
printf("From Server : %s", buff);
if ((strncmp(buff, "exit", 4)) == 0) {
printf("Client Exit...\n"); break; } } }

int main()
{ int sockfd, connfd;
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 =
inet_addr("127.0.0.1");
servaddr.sin_port = htons(PORT);
if (connect(sockfd, (SA*)&servaddr,
sizeof(servaddr))
!= 0) {
printf("connection with the server failed...\n");
exit(0); }
else
printf("connected to the server..\n");
func(sockfd); close(sockfd); }
```