**CN LAB 1**

**Client**

Q1>

#include<stdio.h>

#include<sys/types.h>

#include<sys/socket.h>

#include<netinet/in.h>

#include<netdb.h>

#define SERV\_TCP\_PORT 5035

int main(int argc,char\*argv[])

{

int sockfd;

struct sockaddr\_in serv\_addr;

struct hostent \*server;

char buffer[4096];

sockfd=socket(AF\_INET,SOCK\_STREAM,0);

serv\_addr.sin\_family=AF\_INET;

serv\_addr.sin\_addr.s\_addr=inet\_addr("127.0.0.1");

serv\_addr.sin\_port=htons(SERV\_TCP\_PORT);

printf("\nConnected");

connect(sockfd,(struct sockaddr\*)&serv\_addr,sizeof(serv\_addr)); printf("\nEnter the message\n");

printf("\nClient: ");

fgets(buffer,4096,stdin);

write(sockfd,buffer,4096);

printf("echo message by server: %s",buffer);

printf("\n");

close(sockfd);

}

SERVER

#include<stdio.h>

#include<netinet/in.h>

#include<netdb.h>

#define SERV\_TCP\_PORT 5035

int main(int argc,char\*\*argv)

{

int sockfd,newsockfd,clength;

struct sockaddr\_in serv\_addr,cli\_addr;

char buffer[4096];

sockfd=socket(AF\_INET,SOCK\_STREAM,0);

serv\_addr.sin\_family=AF\_INET;

serv\_addr.sin\_addr.s\_addr=INADDR\_ANY;

serv\_addr.sin\_port=htons(SERV\_TCP\_PORT);

bind(sockfd,(struct sockaddr\*)&serv\_addr,sizeof(serv\_addr));

printf("\nServer is Listening..");

printf("\n");

listen(sockfd,5);

clength=sizeof(cli\_addr);

newsockfd=accept(sockfd,(struct sockaddr\*)&cli\_addr,&clength);

printf("\nClient accepted");

printf("\n");

read(newsockfd,buffer,4096);

printf("\nClient message:%s",buffer);

write(newsockfd,buffer,4096);

printf("\n");

close(sockfd);

}