**Kalinga Institute of Industrial Technology**

**CN LAB-3**

NAME: Ankit Raj

ROLL NO: 1906534

1. **Write a client server program where the client sends and the server accepts it and prints it till exit is not sent.**

Server.c

**#include <arpa/inet.h>**

**#include <netinet/in.h>**

**#include <stdio.h>**

**#include <string.h>**

**#include <sys/socket.h>**

**#include <sys/stat.h>**

**#include<unistd.h>**

**#include <sys/types.h>**

**int main()**

**{**

**struct sockaddr\_in client, server;**

**int s, n, sock,flag\_534=0;**

**char b1\_534[20];**

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

**server.sin\_family = AF\_INET;**

**server.sin\_port = 2000;**

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

**bind(s, (struct sockaddr\*)&server, sizeof server);**

**listen(s, 1);**

**n = sizeof client;**

**sock = accept(s, (struct sockaddr\*)&client, &n);**

**while(flag\_534==0)**

**{**

**recv(sock, b1\_534, sizeof(b1\_534), 0);**

**if(strcmp(b1\_534,"exit")==0)**

**flag\_534=1;**

**printf("\nThe string received is:%s\n", b1\_534);**

**}**

**close(sock);**

**close(s);**

**}**

Client.c

**#include <arpa/inet.h>**

**#include <netinet/in.h>**

**#include <stdio.h>**

**#include <string.h>**

**#include <sys/socket.h>**

**#include<unistd.h>**

**#include <sys/stat.h>**

**#include <sys/types.h>**

**int main()**

**{**

**struct sockaddr\_in client;**

**int s, flag\_534;**

**char buffer\_534[20];**

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

**client.sin\_family = AF\_INET;**

**client.sin\_port = 2000;**

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

**connect(s, (struct sockaddr\*)&client, sizeof client);**

**for (;;) {**

**printf("\nEnter a string: ");**

**scanf("%s", buffer\_534);**

**send(s, buffer\_534, sizeof(buffer\_534), 0);**

**if(strcmp(buffer\_534,"exit")==0)**

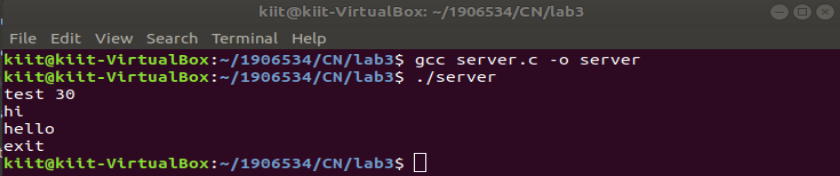
**break;**

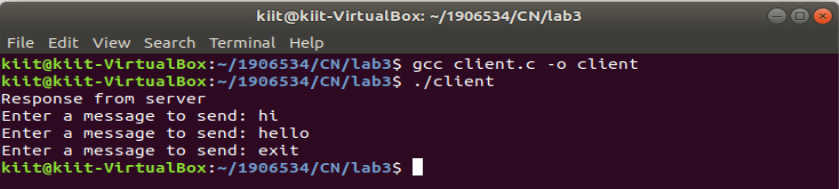
**}**

**close(s);**

**}**

**OUTPUT:**

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1. **Write a client server program to reverse a number which client sends to the server**

Server.c

**#include <arpa/inet.h>**

**#include <netinet/in.h>**

**#include<unistd.h>**

**#include <stdio.h>**

**#include <string.h>**

**#include<stdlib.h>**

**#include <sys/socket.h>**

**#include <sys/stat.h>**

**#include <sys/types.h>**

**int main()**

**{**

**struct sockaddr\_in client, server;**

**int s, n, sock;**

**char a\_534[100],\*b;**

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

**server.sin\_family = AF\_INET;**

**server.sin\_port = 2000;**

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

**bind(s, (struct sockaddr\*)&server, sizeof server);**

**listen(s, 1);**

**n = sizeof client;**

**sock = accept(s, (struct sockaddr\*)&client, &n);**

**recv(s, a\_534, sizeof(a\_534), 0);**

**send(s,a\_534,sizeof(a\_534),0);**

**close(sock);**

**close(s);**

**}**

Client.c

**#include <arpa/inet.h>**

**#include <netinet/in.h>**

**#include <stdio.h>**

**#include <string.h>**

**#include <sys/socket.h>**

**#include<stdlib.h>**

**#include<unistd.h>**

**#include <sys/stat.h>**

**#include <sys/types.h>**

**int main()**

**{**

**struct sockaddr\_in client;**

**int l\_534,s\_534, flag\_534;**

**char buffer\_534[20];**

**s\_534 = socket(AF\_INET, SOCK\_STREAM, 0);**

**client.sin\_family = AF\_INET;client.sin\_port = 2000;**

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

**connect(s\_534, (struct sockaddr\*)&client, sizeof client);**

**scanf("%s\_534",buffer\_534);**

**send(s\_534,buffer\_534,sizeof(buffer\_534),0);**

**recv(s\_534,buffer\_534,sizeof(buffer\_534),0);**

**l\_534=strlen(buffer\_534);**

**for(int i=l\_534-1;i>=0;i--)**

**printf("%c",buffer\_534[i]);**

**close(s\_534);**

**}**

**OUTPUT:**

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