**Ex2 :Computer Networking Lab**

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**1)server.c:**

**#include<stdio.h>**

**#include<stdlib.h>**

**#include<string.h>**

**#include<unistd.h>**

**#include<arpa/inet.h>**

**#define POST 8080**

**#define MAX 1024**

**int main(){**

**int sockfd, connfd;**

**struct sockaddr\_in servaddr, cli;**

**char buffer[MAX];**

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

**servaddr.sin\_family=AF\_INET;**

**servaddr.sin\_addr.s\_addr=htonl(INADDR\_ANY);**

**servaddr.sin\_port=htons(POST);**

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

**listen(sockfd,1);**

**connfd=accept(sockfd,(struct sockaddr\*)&cli, (socklen\_t\*)&(socklen\_t){sizeof(cli)});**

**while(1){**

**read(connfd,buffer,sizeof(buffer));**

**printf("Client: %s", buffer);**

**printf("Server: ");**

**fgets(buffer,sizeof(buffer),stdin);**

**write(connfd,buffer,sizeof(buffer));**

**if(strncmp("EXIT",buffer,4)==0) break;**

**}**

**close(connfd);**

**close(sockfd);**

**return 0;**

**}**

**Output:**

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**Client.c:**

**#include<stdio.h>**

**#include<stdlib.h>**

**#include<string.h>**

**#include<unistd.h>**

**#include<arpa/inet.h>**

**#define PORT 8080**

**#define MAX 1024**

**int main(){**

**int sockfd;**

**struct sockaddr\_in servaddr;**

**char buffer[MAX];**

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

**servaddr.sin\_family = AF\_INET;**

**servaddr.sin\_port = htons(PORT);**

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

**connect(sockfd, (struct sockaddr\*)&servaddr, sizeof(servaddr));**

**while (1) {**

**printf("Client: ");**

**fgets(buffer, sizeof(buffer), stdin);**

**write(sockfd, buffer, sizeof(buffer));**

**if (strncmp("exit", buffer, 4) == 0) break;**

**read(sockfd, buffer, sizeof(buffer));**

**printf("Server: %s", buffer);**

**}**

**close(sockfd);**

**return 0;**

**}**

**Output:**

client.PNG