



**Department of Computer Engineering**  
**(NBA Accredited)**  
**Academic Year 2022-23**

Roll Number: 51

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Lab number: 8

Programs with respective output (screenshot):

**server.c**

```
#include<stdio.h>
#include<unistd.h>
#include<string.h>
#include<sys/socket.h>
#include<stdlib.h>
#include<netinet/in.h>
#include<sys/types.h>
#define MAXLINE 20
#define SERV_PORT 5777
main(int argc,char *argv)
{
    int i,j;
    ssize_t n;
    char line[MAXLINE],revline[MAXLINE];
    int listenfd,connfd,clilen;
    struct sockaddr_in servaddr,cliaddr;
    listenfd=socket(AF_INET,SOCK_STREAM,0);
    bzero(&servaddr,sizeof(servaddr));
    servaddr.sin_family=AF_INET;
    servaddr.sin_port=htons(SERV_PORT);
    bind(listenfd,(struct sockaddr*)&servaddr,sizeof(servaddr));
```

```

listen(listenfd,1);
for(;;)
{
    cliilen=sizeof(cliaddr);
    connfd=accept(listenfd,(struct sockaddr*)&cliaddr,&cliilen);
    printf("CONNECT TO CLIENT\n");
    while(1)
    { if((n=read(connfd,line,MAXLINE))==0)
        break;
        line[n-1]='\0';
        j=0;
        for(i=n-2;i>=0;i--)
            revline[j++]=line[i];
        revline[j]='\0';
        write(connfd,revline,n);}
    }
}

```

```

apsit@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC: ~/Documents/MIT_51$ gcc server.c
server.c:10:1: warning: return type defaults to 'int' [-Wimplicit-int]
  10 | main(int argc,char *argv)
      | ^~~~~
apsit@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC: ~/Documents/MIT_51$ ./a.out
CONNECT TO CLIENT

```

### client.c

```

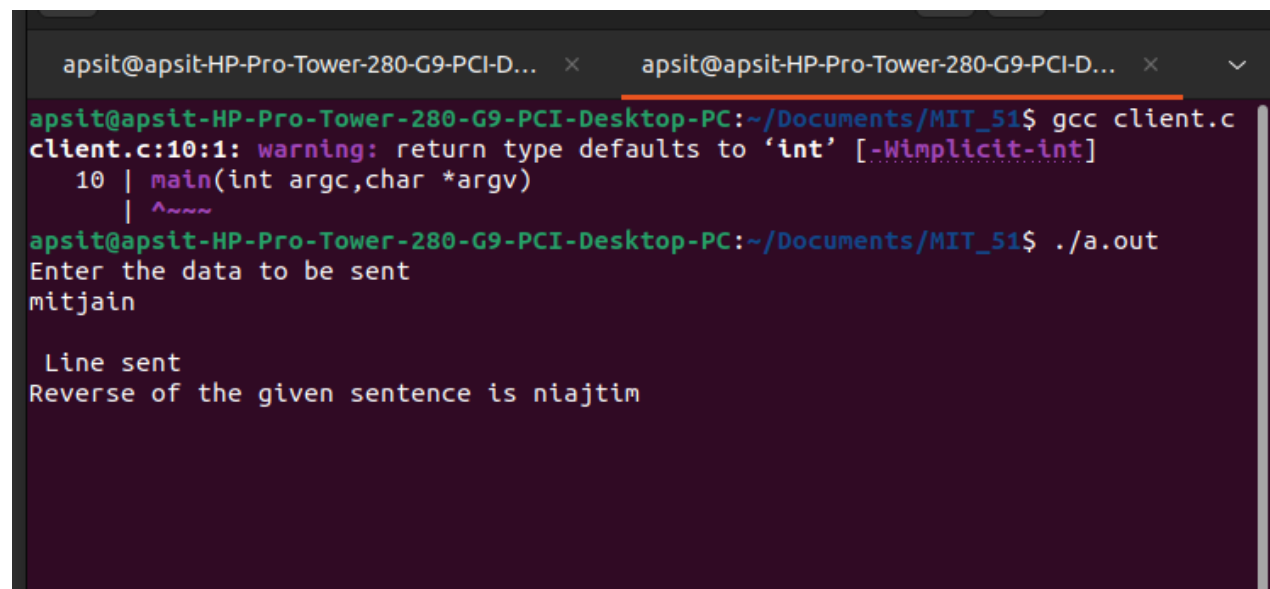
#include<stdio.h>
#include<unistd.h>
#include<string.h>
#include<sys/socket.h>
#include<stdlib.h>
#include<netinet/in.h>
#include<sys/types.h>
#define MAXLINE 20
#define SERV_PORT 5777
main(int argc,char *argv)
{

```

```

char sendline[MAXLINE],revline[MAXLINE]; int sockfd;
struct sockaddr_in servaddr; sockfd=socket(AF_INET,SOCK_STREAM,0);
bzero(&servaddr,sizeof(servaddr));
servaddr.sin_family=AF_INET;servaddr.sin_port=ntohs(SERV_PORT);
connect(sockfd,(struct sockaddr*)&servaddr,sizeof(servaddr));
printf("Enter the data to be sent\n");
while(fgets(sendline,MAXLINE,stdin)!=NULL)
{
write(sockfd,sendline,strlen(sendline));
printf("\n Line sent");
read(sockfd,revline,MAXLINE);
printf("\nReverse of the given sentence is %s",revline);
printf("\n");
}
exit(0); }

```



```

apsit@apsit-HP-Pro-Tower-280-G9-PCI-D... x  apsit@apsit-HP-Pro-Tower-280-G9-PCI-D... x  v
apsit@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:~/Documents/MIT_51$ gcc client.c
client.c:10:1: warning: return type defaults to 'int' [-Wimplicit-int]
   10 | main(int argc,char *argv)
      | ^~~~~
apsit@apsit-HP-Pro-Tower-280-G9-PCI-Desktop-PC:~/Documents/MIT_51$ ./a.out
Enter the data to be sent
mitjain

Line sent
Reverse of the given sentence is niajtim

```