PROGRAM:1

Enter Characters:sa
ASCII value is:115
Binary form:11100111
Receiver side:
VRC:11100111|0
ASCII value is:97
Binary form:11000011
Reciever side:
VRC: 11000011|0

PROGRAM:2

Enter Characters: sa
ASCII value is: 115
Binary form: 11100111
ASCII value is: 97
Binary form: 11000011
Receiver side:
LRC:
11000011
11100111
00100100

PROGRAM:3

Enter divisor:1101
Enter dividend:110010101
Remainder=000000000101
Data sent=110010101101

PROGRAM 4:

Server:

D:\Program Files\Java\jdk1.8.0_112\bin> javac myserver.java
D:\Program Files\Java\jdk1.8.0_112\bin>java myserver
client says:hai

Client

D:\Program Files\Java\jdk1.8.0_112\bin>javac myclient.java
D:\Program Files\Java\jdk1.8.0_112\bin>java myclient
Hai

PROGRAM : 5

CLIENT:

D:\Program Files\Java\jdk1.8.0_112\bin>javac tcpechoclient.java
D:\Program Files\Java\jdk1.8.0_112\bin>java tcpechoclient
Type"bye" to quit
Enter message to server:
hi this is networklab
Server[hi this is networklab]
Enter message to server:

SERVER:

D:\Program Files\Java\jdk1.8.0_112\bin>javac TcpechoServer.java
D:\Program Files\Java\jdk1.8.0_112\bin>java TcpechoServer
Server Ready
Client Connected
Client[hi this is networklab]

PROGRAM 6:

SENDER :

```
D:\Program Files\Java\jdk1.8.0_112\bin>java Sender
Waiting for connection....
Reciever >Connected
Enter data to send....
hai
Data sent >0h
Waiting for ack....
Reciever >packet recieved
Data sent >1a
Waiting for ack....
Reciever >packet recieved
Data sent >0i
Waiting for ack....
Reciever >packet recieved
all data sent.exiting
D:\Program Files\Java\jdk1.8.0_112\bin>
```

RECEIVER :

```
D:\Program Files\Java\jdk1.8.0_112\bin>javac Receiver.java
D:\Program Files\Java\jdk1.8.0_112\bin>java Receiver
Waiting for connection...
Connection established:
Receiver>0h
Receiver>1a
Receiver>0i
Data Received=hai
Waiting for connection...
```

PROGRAM 7:

SERVER :

```
D:\Program Files\Java\jdk1.8.0_112\bin>javac slisender.java
D:\Program Files\Java\jdk1.8.0_112\bin>java slisender
Enter number of iterations:4
Enter window size:4
ACK:FRAME0RECEIVED
ACK:FRAME1RECEIVED
ACK:FRAME2RECEIVED
ACK:FRAME3RECEIVED
D:\Program Files\Java\jdk1.8.0_112\bin>
```

CLIENT :

```
D:\Program Files\Java\jdk1.8.0_112\bin>javac sliclient.java
D:\Program Files\Java\jdk1.8.0_112\bin>java sliclient
0
1
2
3
Sending ack to server
4
5
6
7
Sending ack to server
0
1
2
3
Sending ack to server
4
5
6
7
D:\Program Files\Java\jdk1.8.0_112\bin>
```

PROGRAM 8:

Enter no. of vertices :5
Enter the adjacency matrix :
0 10 0 30 100
10 0 50 0 0
0 50 0 20 10
30 0 20 0 60
100 0 10 60 0
Enter the starting node : 0
Distance of node 1 = 10
Path= 1<-0
Distance of node 2 = 50
Path= 2<-3<-0
Distance of node 3 = 30
Path= 3<-0
Distance of node 4 = 60
Path =4<-2<-3<-0

PROGRAM 9:

Server:

D:\Program Files\Java\jdk1.8.0_112\bin> javac Fileserver.java
D:\Program Files\Java\jdk1.8.0_112\bin>java Fileserver
Connection EstablishedSocket[addr=/127.0.0.1,port=1035 localport=8081]
The requested file is:slisender.java
file transfered

Client:

D:\Program Files\Java\jdk1.8.0_112\bin> javac Fileclient.java
D:\Program Files\Java\jdk1.8.0_112\bin>java Fileclient
Enter the file name to tranfer from the server
slisender.java
file received

PROGRAM 10:

```
D:\Program Files\Java\jdk1.8.0_112\bin>javac Fact*.java
D:\Program Files\Java\jdk1.8.0_112\bin>rmic FactImpl
D:\Program Files\Java\jdk1.8.0_112\bin>Start rmiregistry
D:\Program Files\Java\jdk1.8.0_112\bin>java FactServer
D:\Program Files\Java\jdk1.8.0_112\bin>java FactClient localhost 8
Factorial value is:40320
D:\Program Files\Java\jdk1.8.0_112\bin>
```