**Server.java :-**

import java.io.\*;

import java.net.\*;

public class Server

{

ServerSocket ss;

Socket s;

DataInputStream dis;

DataOutputStream dos;

public Server()

{

int ch;

double ang,ans;

try

{

ss=new ServerSocket(4321);

s=ss.accept();

dis=new DataInputStream(s.getInputStream());

dos=new DataOutputStream(s.getOutputStream());

while(true)

{

ch=dis.readInt();

ang=dis.readDouble();

if(ch==1)

{

ans=Math.sin(ang);

dos.writeDouble(ans);

}

if(ch==2)

{

ans=Math.cos(ang);

dos.writeDouble(ans);

}

if(ch==3)

{

ans=Math.tan(ang);

dos.writeDouble(ans);

}

if(ch==6)

{

ans=Math.sin(ang);

dos.writeDouble(1/ans);

}

if(ch==5)

{

ans=Math.cos(ang);

dos.writeDouble(1/ans);

}

if(ch==4)

{

ans=Math.tan(ang);

dos.writeDouble(1/ans);

}

if(ch==7)

{

dos.flush();

dos.close();

dis.close();

s.close();

ss.close();

}

}

}

catch(Exception e) {}

}

public static void main(String[] args)

{

new Server();

}

}

**Client.java :-**

import java.io.\*;

import java.net.\*;

import java.util.Scanner;

public class Client

{

Socket s;

DataInputStream dis;

DataOutputStream dos;

Scanner sc=new Scanner(System.in);

public Client()

{

try

{

s=new Socket("localhost",4321);

dis=new DataInputStream(s.getInputStream());

dos=new DataOutputStream(s.getOutputStream());

while(true)

{

System.out.println("1. Sin\n2. Cos\n3. Tan\n4. Cot\n5. Sec\n6. Cosec\n7. Exit\nEnter Your Choice : ");

int ch=sc.nextInt();

if(ch==7)

{

dos.writeInt(ch);

System.exit(0);

}

System.out.println("Enter Angle in Degree : ");

double ang=sc.nextDouble();

double ang1=Math.toRadians(ang);

dos.writeInt(ch);

dos.writeDouble(ang1);

double ans=dis.readDouble();

System.out.println("Answer Is : "+ans);

}

}

catch(ArithmeticException e){System.out.println("Infinity Value...");}

catch(Exception e) {}

}

public static void main(String[] args)

{

new Client();

}

}

**Server Output :-**

C:\Users\Administrator\eclipse-workspace\TCPTrigCal\src>javac Server.java

C:\Users\Administrator\eclipse-workspace\TCPTrigCal\src>java Server

**Client Output :-**

C:\Users\Administrator\eclipse-workspace\TCPTrigCal\src>javac Client.java

C:\Users\Administrator\eclipse-workspace\TCPTrigCal\src>java Client

1. Sin

2. Cos

3. Tan

4. Cot

5. Sec

6. Cosec

7. Exit

Enter Your Choice :

1

Enter Angle in Degree :

45

Answer Is : 0.7071067811865475

1. Sin

2. Cos

3. Tan

4. Cot

5. Sec

6. Cosec

7. Exit

Enter Your Choice :

2

Enter Angle in Degree :

56

Answer Is : 0.5591929034707468

1. Sin

2. Cos

3. Tan

4. Cot

5. Sec

6. Cosec

7. Exit

Enter Your Choice :

3

Enter Angle in Degree :

60

Answer Is : 1.7320508075688767

1. Sin

2. Cos

3. Tan

4. Cot

5. Sec

6. Cosec

7. Exit

Enter Your Choice :

7