7.)Write a program to implement Chat Server

//Server

```java
import java.net.*;
import java.io.*;
public class servertcp
{
public static void main(String args[]) throws IOException
{
ServerSocket ss=new ServerSocket(12);
Socket s=ss.accept();
System.out.println("Connection from "+s);

PrintWriter pw1=new PrintWriter(s.getOutputStream(),true);
BufferedReader br3=new BufferedReader(new InputStreamReader(s.getInputStream()));
BufferedReader br4=new BufferedReader(new InputStreamReader(System.in));
System.out.println("i m ready");
String s1, s2;
/*while((s1=br4.readLine())!=null)
{
pw1.println(s1);
System.out.println(s2);
}
*/
while(true)
{
do
{
s1=br4.readLine();
pw1.println(s1);
}
while(!s1.equals("over"));
do
{
s2=br3.readLine();
System.out.println(s2);
}
while(!s2.equals("over"));
}
}
}


// Client

import java.net.*;
import java.io.*;
public class clienttcp
{
```

```java
public static void main(String args[]) throws IOException
{
Socket cc=new Socket(InetAddress.getLocalHost(),12);
PrintWriter pw=new PrintWriter(cc.getOutputStream(),true);
BufferedReader br1=new BufferedReader(new InputStreamReader(cc.getInputStream()));
BufferedReader br2=new BufferedReader(new InputStreamReader(System.in));
String str1, str2;
/*while((str1=br2.readLine())!=null)
{
System.out.println(str1);
//pw.println(str2);
}
*/
while(true)
{
do
{
str1=br1.readLine();
System.out.println(str1);
}
while(!str1.equals("over"));
do
{
str2=br2.readLine();
pw.println(str2);
}
while(!str2.equals("over"));
}
}
}
```

8.) Write a Program to implement termination detection

```c
#include<stdio.h>

#include<conio.h>

#include<dos.h>

#include<stdlib.h>

#include<math.h>

void main()

{

int i,j,k=0,n,tw,total=0,we,ca,w[20];

clrscr();

printf("enter the no of process=");

scanf("%d",&n);

printf("\n\nassign a controlling agent=");

scanf("%d",&ca);

printf("\n\nenter the total weight=");

scanf("%d",&tw);

while((k<n))

{

randomize();

w[k]=random(tw);

tw=tw-w[k];

k++;

}

for(k=0;k<n;k++)

{total=total+w[k];
```