

Program to print sum of series $1-(x/1! + x^2/2! + \dots + x^n/n!)$

```
import java.io.*;
import java.lang.Math;
class series2
{
    public static void main(String ar[])
    {
        int i;
        double x=0,n=0,sum=0;
        DataInputStream obj= new DataInputStream(System.in);

        try
        {
            System.out.println("Enter the value of x:");
            x=Integer.parseInt(obj.readLine());
            System.out.println("Enter the value of n:");
            n=Integer.parseInt(obj.readLine());
        }
        catch(IOException e)
        {}

        for(i=1;i<=n;i++)
        {
            sum=sum+Math.pow(x,i)/fact(i);
        }

        System.out.println("Answer is:"+(1-sum));
    }
}
```

```
    }  
  
    static int fact(int no)  
    { int f=1;  
      for(int j=no;j>1;j--)  
        f=f*j;  
      return f;  
    }  
}
```

Output:

```
C:\Documents and Settings\Administrator\Desktop\java\11-07>javac series2.java  
Note: series2.java uses or overrides a deprecated API.  
Note: Recompile with -Xlint:deprecation for details.  
  
C:\Documents and Settings\Administrator\Desktop\java\11-07>java series2  
Enter the value of x:  
2  
Enter the value of n:  
5  
Answer is:-5.266666666666667
```