



**techno india
university**

WEST BENGAL

SAYAN BANDYOPADHYAY

181001001040

BCS3A

OOP JAVA ASSIGNMENT 1

TECHNO
INDIA GROUP

1. . Write a program to print your name.\

Ans]

```
import java.lang.*;

class Q1

{

public static void main( String args[])

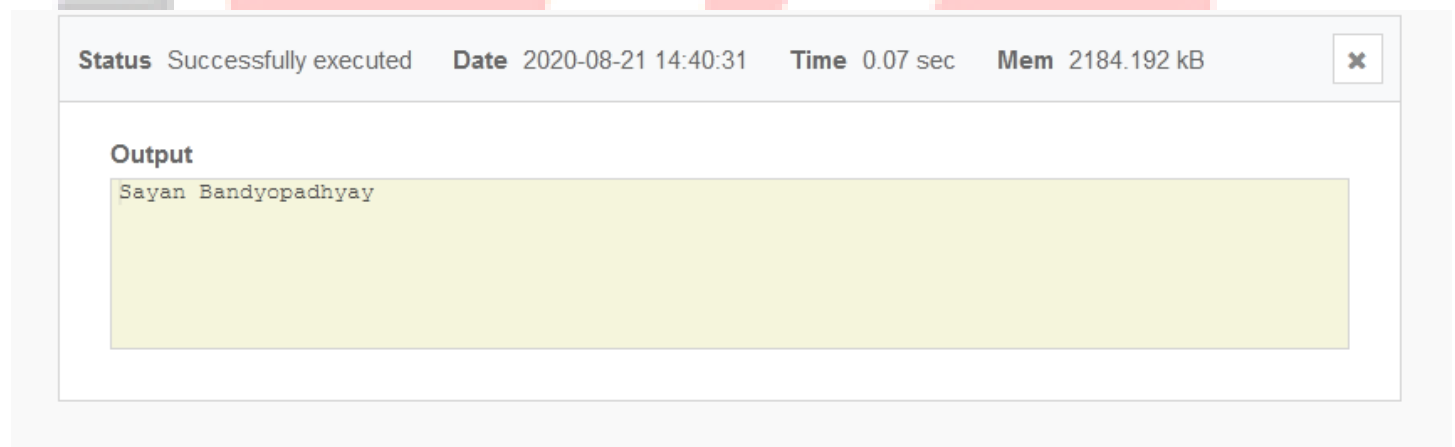
{

System.out.println("Sayan Bandyopadhyay");

}

}
```

OUTPUT (IDE Used: <https://www.codechef.com/ide>)



2. Write a program to read the price of an item in the decimal form (like 75.95) and print the output in paise (like 7595 paise).

ANS]

```
import java.lang.*;

import java.util.Scanner;

class Q2

{
```

```
public static void main( String args[])
{
    float rs,paise;

    System.out.println("enter the price:");

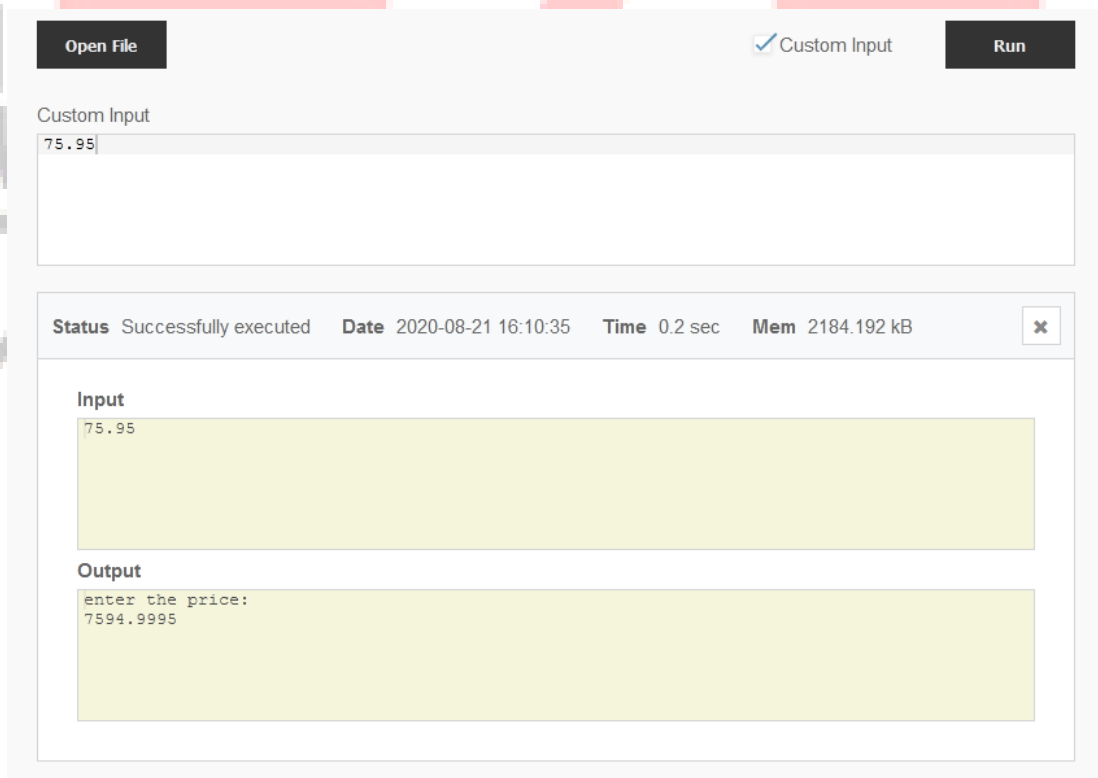
    Scanner sc=new Scanner(System.in);

    rs=sc.nextFloat();

    paise=rs*100;

    System.out.println(+paise);
}
}
```

OUTPUT: (IDE used: <https://www.codechef.com/ide>)



3. Write a program to convert the given temperature in Fahrenheit to Celsius using the following conversion formula:
 $C = (F-32)/1.8$

ANS]

```
import java.lang.*;

import java.util.Scanner;

class Q3
{
    public static void main( String args[])
    {
        float F,C;

        System.out.println("enter the temp:");

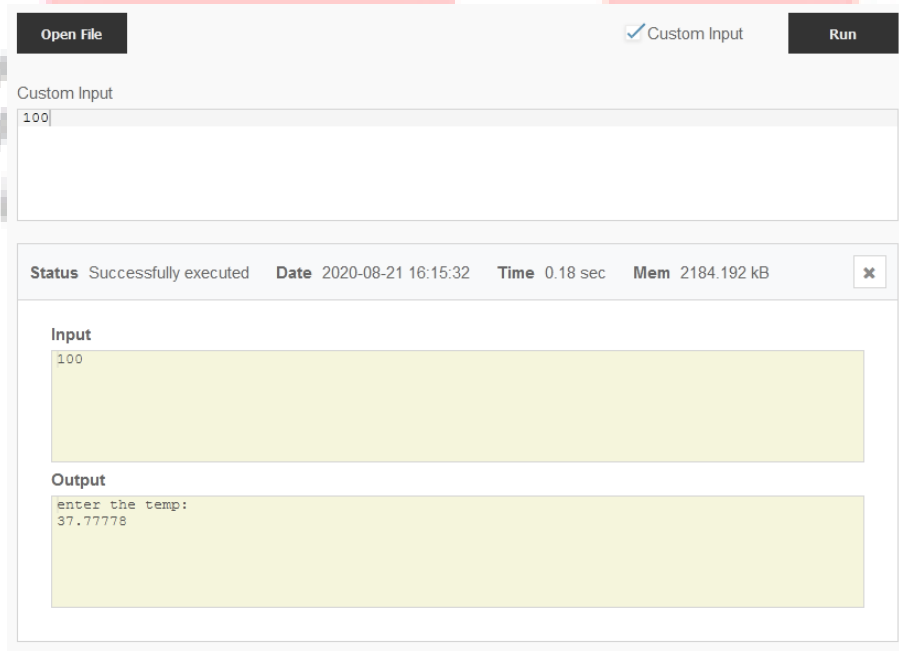
        Scanner sc=new Scanner(System.in);

        F=sc.nextFloat();

        C=(F-32)/1.8f;

        System.out.println(+C);
    }
}
```

OUTPUT: (IDE used: <https://www.codechef.com/ide>)



4. Write a program to determine sum of the following series for given value of n: $(1 + 1/2 + 1/3$

+ + 1/n2). Print the result up to two decimal places.

ANS]

```
import java.io.*;
```

```
class Q4 {
```

```
    static double sum(int n)
```

```
    {
```

```
        double i, s = 0.0;
```

```
        for (i = 1; i <= n; i++)
```

```
            s = s + 1/i;
```

```
        return s;
```

```
    }
```

```
    public static void main(String args[])
```

```
    {
```

```
        int n = 5;
```

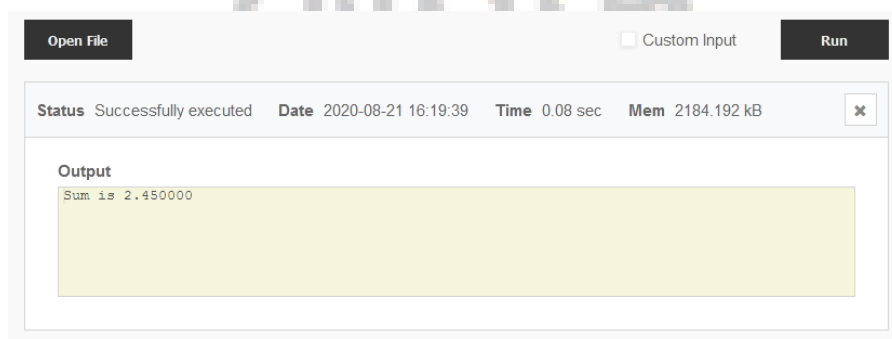
```
        System.out.printf("Sum is %f", sum(n));
```

```
    }
```

```
}
```

```
}
```

OUTPUT: (IDE used: <https://www.codechef.com/ide>)



5. Write a program to find the factorial of a given integer number using recursion (take input

using command-line argument).

ANS]

```
import java.lang.*;
import java.util.Scanner;

class Q5
{
    static int factorial(int n)
    {
        if(n==0)
            return 1;
        else
            return (n*factorial(n-1));
    }

    public static void main( String args[])
    {
        int fact, n;
        System.out.println("enter the no:");
        Scanner sc=new Scanner(System.in);
        n=sc.nextInt();
        fact=factorial(n);
        System.out.println("factorial="+fact);
    }
}
```

OUTPUT: (IDE used: <https://www.codechef.com/ide>)

Open File

☒ Custom Input

Run

Custom Input

5

Status Successfully executed **Date** 2020-08-21 16:24:08 **Time** 0.19 sec **Mem** 2184.192 kB

×

Input

5

Output

enter the no:
factorial=120

6. Write a program to show Fibonacci series up to n-th terms using recursion

ANS]

class Q6{

static int n1=0,n2=1,n3=0;

static void printFibonacci(int count){

if(count>0){

n3 = n1 + n2;

n1 = n2;

n2 = n3;

```

        System.out.print(" "+n3);

        printFibonacci(count-1);

    }

}

public static void main(String args[]){

    int count=10;

    System.out.print(n1+" "+n2);

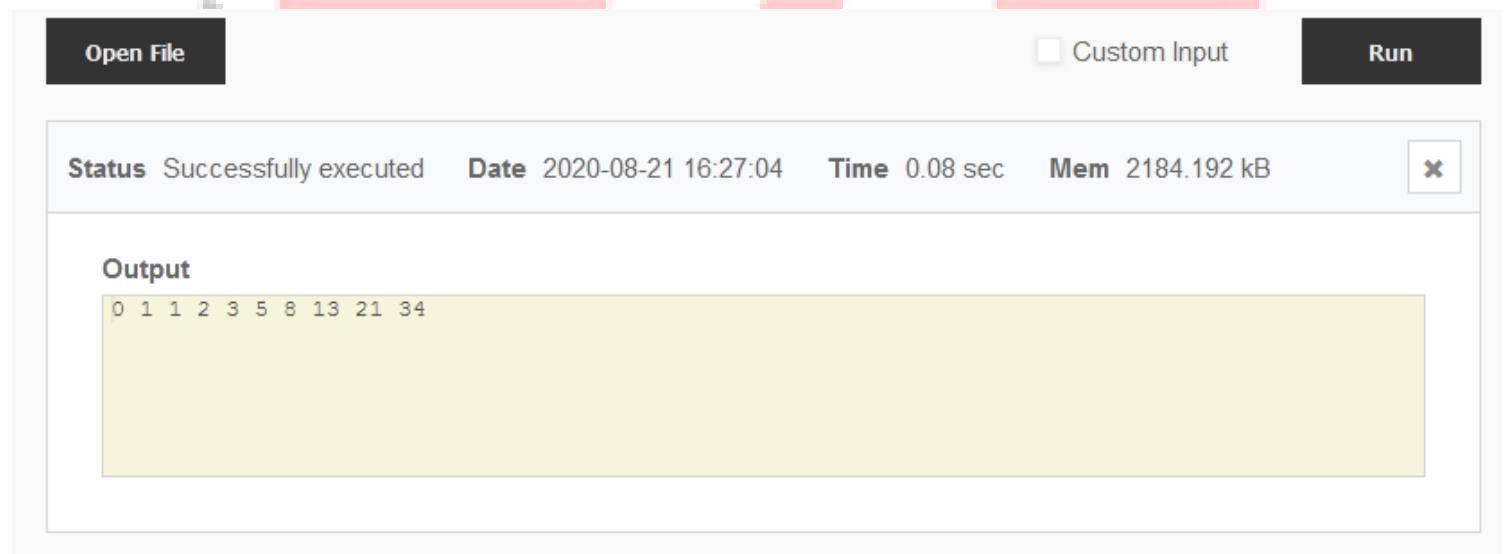
    printFibonacci(count-2);

}

}

```

OUTPUT: (IDE used: <https://www.codechef.com/ide>)



Open File ☐ Custom Input Run

Status Successfully executed Date 2020-08-21 16:27:04 Time 0.08 sec Mem 2184.192 kB

Output

```
0 1 1 2 3 5 8 13 21 34
```

7. Write a Program of Sum of Series $(1+x+x^2+x^3+x^4+\dots)$ up to n-th terms).

ANS]

```

import java.lang.*;

import java.util.Scanner;

import java.lang.Math;

class Q7

```



```
{  
  
public static void main( String args[])  
  
{  
  
double n,x,sum=0;  
  
System.out.println("enter the values for X & n:");  
  
Scanner sc=new Scanner(System.in);  
  
n=sc.nextDouble();  
  
x=sc.nextDouble();  
  
for (int i=0;i<=n;i++)  
  
sum=sum+Math.pow(x,i);  
  
System.out.println(sum);  
  
}  
  
}
```

OUTPUT: (IDE used: <https://www.codechef.com/ide>)

The screenshot shows a Java IDE interface. At the top, there are three buttons: "Open File", "Custom Input" (which is checked), and "Run". Below these buttons is a "Custom Input" section with a text area containing the numbers "8" and "5" on separate lines. Below the input section is a status bar showing "Status Successfully executed", "Date 2020-08-21 16:33:02", "Time 0.12 sec", and "Mem 2184.192 kB". Below the status bar are two sections: "Input" and "Output". The "Input" section shows the numbers "8" and "5" on separate lines. The "Output" section shows the text "enter the values for X & n:" followed by the number "488281.0".

Open File Custom Input Run

Custom Input

8
5

Status Successfully executed Date 2020-08-21 16:33:02 Time 0.12 sec Mem 2184.192 kB

Input

8
5

Output

enter the values for X & n:
488281.0