SPOJ 3

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URL: https://www.spoj.com/problems/FCTRL2/

Specification: You are asked to calculate factorials of some small positive integers.

Input

An integer t, 1¡=t¡=100, denoting the number of testcases, followed by t lines, each containing a single integer n, 1¡=n¡=100.

Output´

For each integer n given at input, display a line with the value of n!

Example:

Example

Sample input:

```
4
1
2
5
3
```

Sample output:

```
1
2
120
6
```

1 Source Code

1.1 Python

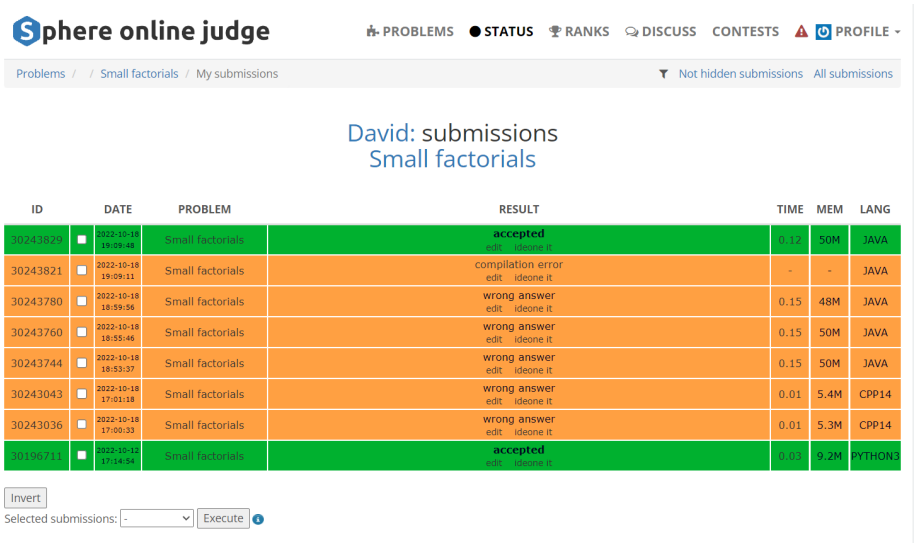
```python
def factorial(n):
    if n == 0:
        return 1
    else:
        return n * factorial(n-1)

test_cases = int(input())
factorials = []
for i in range(test_cases):
    factorials.append(factorial(int(input())))
```

```
11
12 for i in factorials:
13     print(i)
```

1.2 Java

```
1  import java.io.BufferedReader;
2  import java.io.IOException;
3  import java.io.InputStreamReader;
4  import java.math.BigInteger;
5  import java.util.Scanner;
6
7  public class Spoj3 {
8      private static BigInteger factorial(int n)
9      {
10         if (n == 0) {
11             return BigInteger.ONE;
12         }
13         else
14         {
15             return BigInteger.valueOf(n).multiply(factorial(n - 1))
       ;
16         }
17     }
18
19     public static void main (String[] args) throws IOException {
20         BufferedReader bf = new BufferedReader(new
       InputStreamReader(System.in));
21         int test_cases = Integer.parseInt(bf.readLine());
22         for(int x=0 ;x<test_cases ;x++)
23         {
24             System.out.println(factorial(Integer.parseInt(bf.
       readLine())));
25         }
26     }
27 }
```

2 Submission



Sphere online judge

PROBLEMS STATUS RANKS DISCUSS CONTESTS PROFILE

Problems / / Small factorials / My submissions

Not hidden submissions All submissions

David: submissions
Small factorials

ID	DATE	PROBLEM	RESULT	TIME	MEM	LANG
30243829	2022-10-18 19:09:40	Small factorials	accepted edit ideone it	0.12	50M	JAVA
30243821	2022-10-18 19:09:11	Small factorials	compilation error edit ideone it	-	-	JAVA
30243780	2022-10-18 18:59:56	Small factorials	wrong answer edit ideone it	0.15	48M	JAVA
30243760	2022-10-18 18:55:46	Small factorials	wrong answer edit ideone it	0.15	50M	JAVA
30243744	2022-10-18 18:53:37	Small factorials	wrong answer edit ideone it	0.15	50M	JAVA
30243043	2022-10-18 17:01:18	Small factorials	wrong answer edit ideone it	0.01	5.4M	CPP14
30243036	2022-10-18 17:00:33	Small factorials	wrong answer edit ideone it	0.01	5.3M	CPP14
30196711	2022-10-12 17:14:54	Small factorials	accepted edit ideone it	0.03	9.2M	PYTHON3

Invert
Selected submissions: - Execute