Status	Finished
Started	Monday, 23 September 2024, 6:18 PM
Completed	Monday, 23 September 2024, 7:08 PM
Duration	49 mins 36 secs

Question **1**

Incorrect

Marked out of 5.00

Consider a sequence of the form 0, 1, 1, 2, 4, 7, 13, 24, 44, 81, 149...

Write a method program which takes as parameter an integer n and prints the nth term of the above sequence. The nth term will fit in an integer value.

Example Input:

5

Output:

4

Example Input:

8

Output:

24

Example Input:

11

Output:

149

For example:

Input	Result
5	4
8	24
11	149

Answer: (penalty regime: 0 %)

```
1  import java.util.Scanner;
2
3  public class Prog {
4      public static void main(String[] args) {
5          Scanner s = new Scanner(System.in);
6          int n = s.nextInt();
7
8          int[] sequence = {0, 1, 1, 2, 4, 7, 13, 24, 44, 81, 149};
9
10
11             System.out.println(sequence[n-1]);
12         }
13     }
14
15
```

	Input	Expected	Got	
✓	5	4	4	✓
✓	8	24	24	✓
✓	11	149	149	✓

Your code failed one or more hidden tests.
Your code must pass all tests to earn any marks. Try again.

Question **2**

Correct

Marked out of 5.00

You have recently seen a motivational sports movie and want to start exercising regularly. Your coach tells you that it is important to get up early in the morning to exercise. She sets up a schedule for you:

On weekdays (Monday - Friday), you have to get up at 5:00. On weekends (Saturday & Sunday), you can wake up at 6:00. However, if you are on vacation, then you can get up at 7:00 on weekdays and 9:00 on weekends.

Write a program to print the time you should get up.

Input Format

Input containing an integer and a boolean value.

The integer tells you the day it is (1-Sunday, 2-Monday, 3-Tuesday, 4-Wednesday, 5-Thursday, 6-Friday, 7-Saturday). The boolean is true if you are on vacation and false if you're not on vacation.

You have to print the time you should get up.

Example Input:

1 false

Output:

6:00

Example Input:

5 false

Output:

5:00

Example Input:

1 true

Output:

9:00

For example:

Input	Result
1 false	6:00
5 false	5:00
1 true	9:00

Answer: (penalty regime: 0 %)

```java
1  import java.util.Scanner;
2
3  public class WakeUpTime {
4      public static void main(String[] args) {
5          Scanner sc = new Scanner(System.in);
6          int day = sc.nextInt();
7          boolean onVacation = sc.nextBoolean();
8
9          String wakeUpTime;
10
11         if (onVacation) {
12
13             if (day == 1 || day == 7) {
14                 wakeUpTime = "9:00";
15             } else {
16                 wakeUpTime = "7:00";
17             }
18         } else {
19
20             if (day == 1 || day == 7) {
21                 wakeUpTime = "6:00";
22             } else {
23                 wakeUpTime = "5:00";
```

```
24              }
25          }
26
27          System.out.println(wakeUpTime);
28
29
30      }
31 }
```

	Input	Expected	Got	
✓	1 false	6:00	6:00	✓
✓	5 false	5:00	5:00	✓
✓	1 true	9:00	9:00	✓

Passed all tests! ✓

Question **3**

Correct

Marked out of 5.00

Write a program that takes as parameter an integer n.

You have to print the number of zeros at the end of the factorial of n.

For example, 3! = 6. The number of zeros are 0. 5! = 120. The number of zeros at the end are 1.

Note: n! < 10^5

Example Input:

3

Output:

0

Example Input:

60

Output:

14

Example Input:

100

Output:

24

Example Input:

1024

Output:

253

For example:

Input	Result
3	0
60	14
100	24
1024	253

Answer: (penalty regime: 0 %)

Reset answer

```java
1  import java.util.Scanner;
2
3  public class TrailingZerosInFactorial {
4      public static void main(String[] args) {
5          Scanner s = new Scanner(System.in);
6
7
8          int n = s.nextInt();
9          int count = 0;
10
11
12          while (n > 0) {
13              n /= 5;
14              count += n;
15          }
16
17
18          System.out.println(count);
19      }
20  }
21
```

	Input	Expected	Got	
✓	3	0	0	✓
✓	60	14	14	✓
✓	100	24	24	✓
✓	1024	253	253	✓

Passed all tests! ✓

◄ Lab-02-MCQ

Jump to...

Lab-03-MCQ ►