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Status	Finished
Started	Sunday, 22 September 2024, 9:08 PM
Completed	Sunday, 6 October 2024, 1:25 PM
Duration	13 days 16 hours

Question 1

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

```
1 import java.io.*;
2
3 import java.util.Scanner;
4
5 class prog {
6     // Function to return trailing
7     // 0s in factorial of n
8     static int findTrailingZeros(int n)
9     {
10
11         if (n < 0) // Negative Number Edge Case
12
13             return -1;
14
15         // Initialize result
16
```

```

16
17     int count=0;
18     // Keep dividing n by powers
19     // of 5 and update count
20     for (int i = 5; n / i >= 1; i*=5) {
21         count += n / i;
22     }
23     return count;
24 }
25
26 // Driver Code
27 public static void main(String[] args)
28 {
29     Scanner sc= new Scanner(System.in);
30     int n=sc.nextInt();
31     int res=findTrailingZeros(n);
32     System.out.println(res);
33 }
34 }

```

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

Passed all tests! ✓

Question 2

Correct

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.*;
2 class prog
3 {
4     public static void main(String args[])
5     {
6         Scanner input = new Scanner(System.in);
7         int a=0,b=1,c=1;
8         int d=a+b+c;
9         int n=input.nextInt();
10        for(int i=4;i<n;i++)
11        {
12            a=b;
13            b=c;
14            c=d;
15            d=a+b+c;
16        }
17        System.out.println(d);
18    }
19 }
```

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

Passed all tests! ✓

Question **3**

Correct

Marked out of 5.00

Write a Java program to input a number from user and print it into words using for loop. How to display number in words using loop in Java programming.

Logic to print number in words in Java programming.

Example**Input**

1234

Output

One Two Three Four

Input:

16

Output:

one six

For example:

Test	Input	Result
1	45	Four Five
2	13	One Three
3	87	Eight Seven

Answer: (penalty regime: 0 %)

```
1 import java.util.Scanner;
2
3 public class NumberToWords {
4
5     // Array to store word equivalents of digits
6     static String[] digitWords = { "Zero", "One", "Two", "Three", "Four",
7                                     "Five", "Six", "Seven", "Eight", "Nine" };
8
9     public static void main(String[] args) {
10         Scanner scanner = new Scanner(System.in);
11
12         // Get integer input from user
13         int number = scanner.nextInt();
14
15         // Convert the number to a string to loop through each digit
16         String numStr = Integer.toString(number);
17
18         for (int i = 0; i < numStr.length(); i++) {
19             char digitChar = numStr.charAt(i);
20
21             // If the character is a negative sign, print "Minus"
22             if (digitChar == '-') {
23                 System.out.print("Minus ");
24             } else {
25                 // Convert the character to an integer index and print its word equivalent
26                 int digit = Character.getNumericValue(digitChar);
27                 System.out.print(digitWords[digit] + " ");
28             }
29         }
30     }
31 }
```

	Test	Input	Expected	Got	
✓	1	45	Four Five	Four Five	✓
✓	2	13	One Three	One Three	✓
✓	3	87	Eight Seven	Eight Seven	✓

Passed all tests! ✓

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