

WEEK -02

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

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

```

import java.util.Scanner;

class prog {

    static int findTrailingZeros(int n)
    {
        if (n < 0){
            return -1;
        }
        int count=0;
        for (int i = 5; n / i >= 1;i*=5  ){
            count += n / i;
        }
        return count;
    }

    public static void main(String[] args)
    {
        int n ;

        Scanner sc= new Scanner(System.in);

        n=sc.nextInt();

        System.out.println(findTrailingZeros(n));
    }
}

```

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

Passed all tests! ✓

Consider the following sequence:

1st term: 1

2nd term: 1 2 1

3rd term: 1 2 1 3 1 2 1

4th term: 1 2 1 3 1 2 1 4 1 2 1 3 1 2 1

And so on. Write a program that takes as parameter an integer n and prints the nth terms of this sequence.

Example Input:

1

Output:

1

Example Input:

4

Output:

1 2 1 3 1 2 1 4 1 2 1 3 1 2 1

For example:

Input	Result
1	1
2	1 2 1
3	1 2 1 3 1 2 1
4	1 2 1 3 1 2 1 4 1 2 1 3 1 2 1

```
import java.util.*;
```

```
public class prog{
```

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

```
        Scanner sc = new Scanner(System.in);
```

```
        int n=sc.nextInt();
```

```
        String s= "1";
```

```

for(int i=2;i<=n;i++){
    s=s+" "+i+" "+s;

}

System.out.println(s);
}
}

```

	Input	Expected	Got	
✓	1	1	1	✓
✓	2	1 2 1	1 2 1	✓
✓	3	1 2 1 3 1 2 1	1 2 1 3 1 2 1	✓
✓	4	1 2 1 3 1 2 1 4 1 2 1 3 1 2 1	1 2 1 3 1 2 1 4 1 2 1 3 1 2 1	✓

Passed all tests! ✓

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

Test	Input	Result
2	13	One Three
3	87	Eight Seven

```
import java.util.*;
```

```
public class prog{
```

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

```
        Scanner sc = new Scanner(System.in);
```

```
        String[] w={"Zero","One","Two","Three","Four","Five","Six","Seven","Eight","Nine"};
```

```
        int n=sc.nextInt();
```

```
        String s=Integer.toString(n);
```

```
        for(int i=0;i<s.length();i++){
```

```
            System.out.print(w[s.charAt(i)-'0']+" ");
```

```
        }
```

```
    }
```

```
}
```

	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! ✓