LAB-02

FLOW CONTROL STATEMENTS

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

PROGRAM:

```java
import java.util.Scanner;
class prog{
   public static void main(String[] args){
    Scanner o=new Scanner(System.in);
    int a=o.nextInt();
    int re=0, r=0,d=0;

    while(a!=0){
       d=a%10;
       re=re*10+d;
       a/=10;
    }
    while(re>0){

       r=re%10;

       if(r==1) System.out.print("One ");
```

```java
        if(r==2) System.out.print("Two ");
        if(r==3) System.out.print("Three ");
        if(r==4) System.out.print("Four ");
        if(r==5) System.out.print("Five ");
        if(r==6) System.out.print("Six ");
        if(r==7) System.out.print("Seven ");
        if(r==8) System.out.print("Eight ");
        if(r==9) System.out.print("Nine ");

        re=re/10;
        r=re%10;

    }
}
}
```

OUTPUT :

	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! ✓

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

PROGRAM :

```java
import java.io.*;
import java.util.*;
class prog {
    public static void main(String[] args) {
        // Example input
        Scanner o=new Scanner(System.in);
        int input=o.nextInt();
        System.out.println(Math.abs(input%10));
    }
}
```

OUTPUT :

	Input	Expected	Got	
✓	197	7	7	✓
✓	-197	7	7	✓

Passed all tests! ✓

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

PROGRAM :

```java
import java.util.Scanner;
class prog {
    // Function to return trailing 0s in factorial of n
    static int findTrailingZeros(int n) {
        if (n < 0) // Negative Number Edge Case
            return -1;
        // Initialize result
        int count = 0;
        // Keep dividing n by powers of 5 and update count
        for (int i = 5; n / i >= 1; i *= 5)
            count += n / i;
        return count;
    }
    // Driver Code
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        // taking input
        int n = sc.nextInt();
        // Output the number of trailing zeros in n!
        System.out.println(findTrailingZeros(n));
    }
}
```

OUTPUT :

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

Passed all tests! ✓