

30. JUNIT TESTING TO CHECK WHETHER THE GIVEN NUMBER IS PALINDROME OR NOT

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AIM

To Perform junit Testing to Check Whether the given number is palindrome or not.

PROGRAM

```
package sse;

import java.util.Scanner;
import static org.junit.Assert.assertTrue;
public class palindrome
{
    public static void main(String args[])
    {
        Scanner in = new Scanner(System.in);
        int r, sum = 0, temp; int n = in.nextInt();
        temp = n;
        while (n > 0)
        {
            r = n % 10; n = n / 10;
            sum = (sum * 10)+r;
        }
        System.out.println(sum);
        assertTrue(787==sum);
        if(temp==sum)
            System.out.println(sum+" is palindrome number");
        else
            System.out.println(sum+" is not palindrome number");
    }
}
```

OUTPUT

The screenshot shows the Eclipse IDE with the file `palindrome.java` open. The code is a Java application that takes an integer input and checks if it is a palindrome. The logic involves reversing the digits of the input and comparing it with the original number. The console output shows the program terminated successfully, printing `787` and `787 is palindrome number`.

```
arunk - sse/src/sse/palindrome.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer
> sqam
> sse

JUnit1.java reverse.java username.java intrest.java palindrome.java google.java yahoo.java

6 {
7= public static void main(String args[])
8 {
9     Scanner in = new Scanner(System.in);
10    int r, sum = 0, temp; int n = in.nextInt();
11    temp = n;
12    while (n > 0)
13    {
14        r = n % 10; n = n / 10;
15        sum = (sum * 10)+r;
16    }
17    System.out.println(sum);
18    assertTrue(787==sum);
19    if(temp==sum)
20        System.out.println(sum+" is palindrome number");
21    else
22        System.out.println(sum+" is not palindrome number");
23 }
24
25
26 }
```

Problems Javadoc Declaration Console

<terminated> palindrome [Java Application] C:\Program Files\Java\jre1.8.0_171\bin\javaw.exe (25-May-2023, 3:53:08 pm)

787
787
787 is palindrome number

The screenshot shows the Eclipse IDE with the file `palindrome.java` open. The code is the same as in the previous screenshot. However, the console output shows an exception: `Exception in thread "main" java.lang.AssertionError`. This indicates that the assertion `assertTrue(787==sum)` failed, likely because the reversed number is not 787. The stack trace points to the `assertTrue` method in `Assert.java` and the `main` method in `palindrome.java`.

```
arunk - sse/src/sse/palindrome.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

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JUnit1.java reverse.java username.java intrest.java palindrome.java google.java yahoo.java

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Problems Javadoc Declaration Console

<terminated> palindrome [Java Application] C:\Program Files\Java\jre1.8.0_171\bin\javaw.exe (25-May-2023, 3:54:20 pm)

121
121
Exception in thread "main" java.lang.AssertionError
at org.junit.Assert.fail(Assert.java:86)
at org.junit.Assert.assertTrue(Assert.java:41)
at org.junit.Assert.assertTrue(Assert.java:52)
at sse.palindrome.main(palindrome.java:18)

RESULT

Hence the junit Testing Check Whether the given number is palindrome or not performed successfully.