

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

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AIM

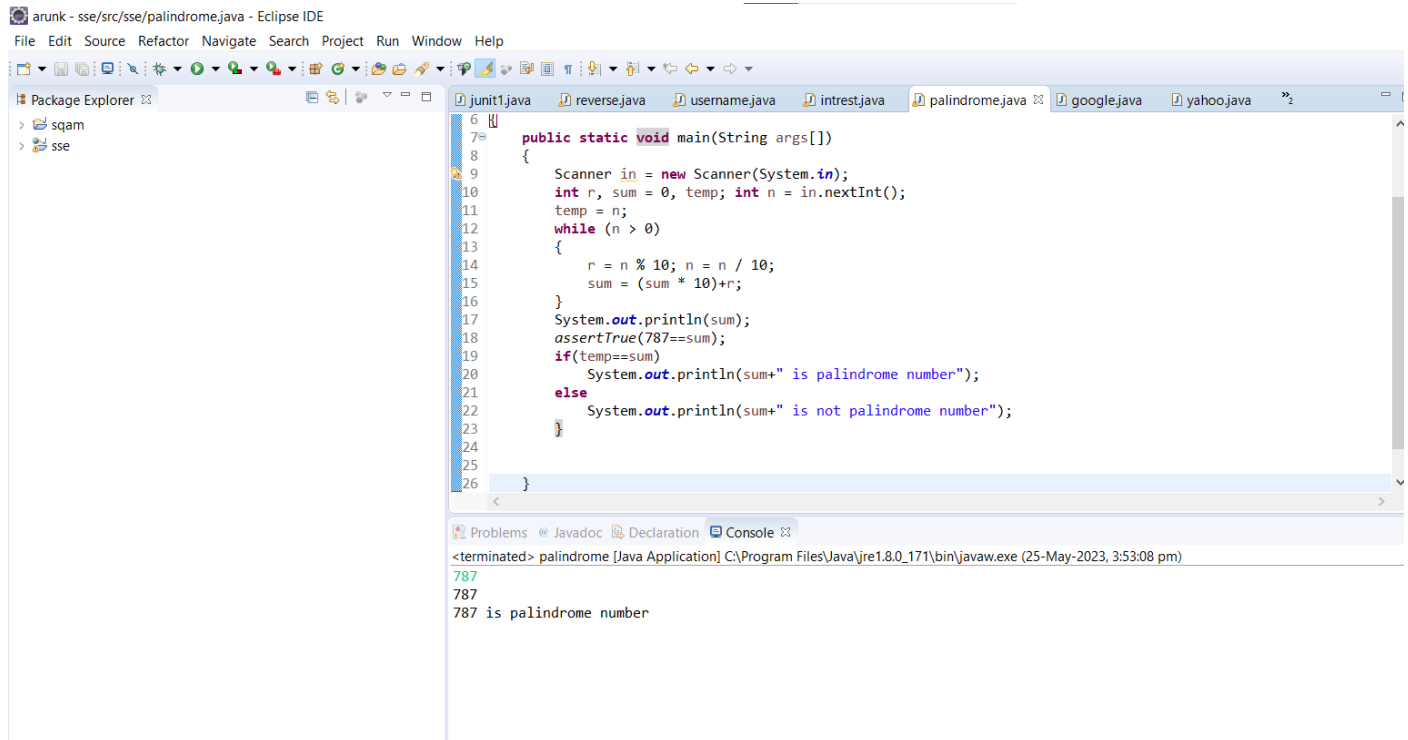
To Perform junit Testing to Check Whether the given number is palindrome or not.

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

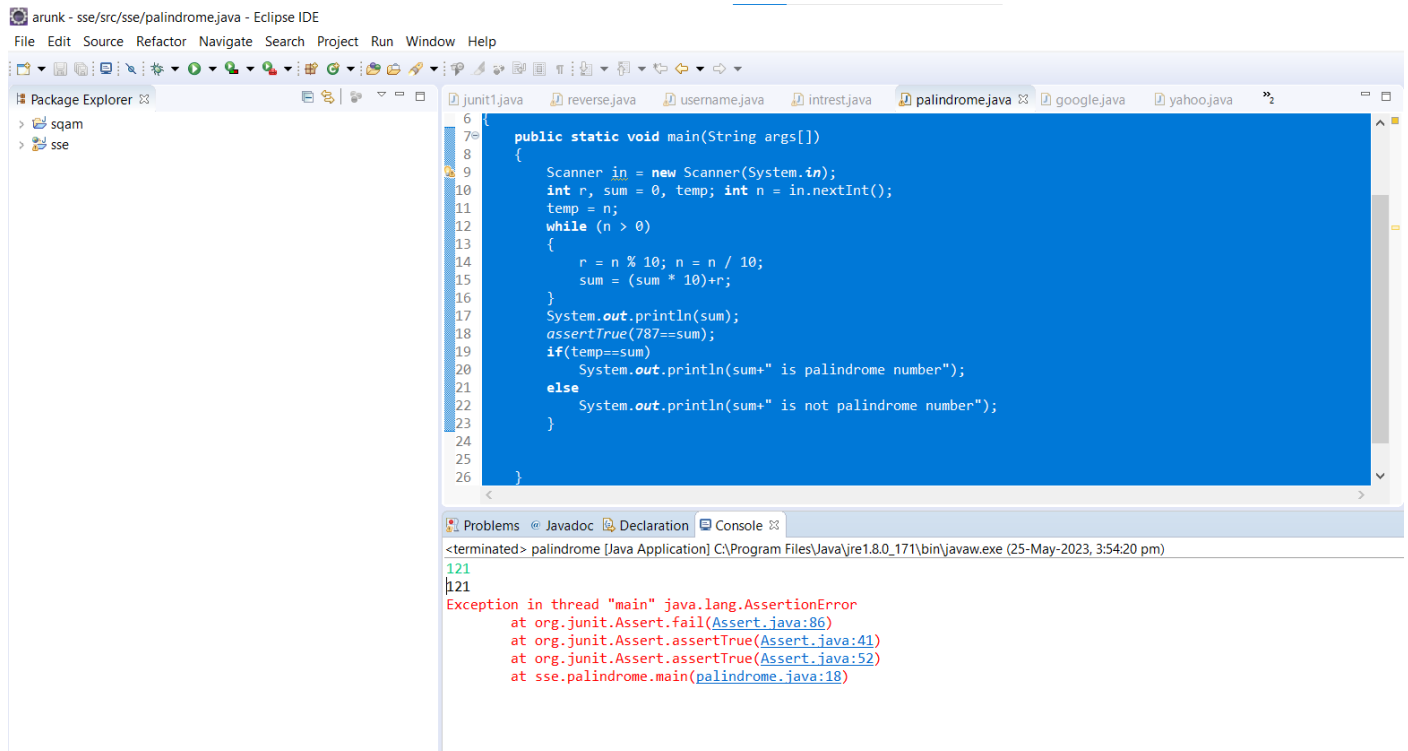


The screenshot shows the Eclipse IDE with the file `palindrome.java` open. The code is a Java program that checks if a number is a palindrome. It uses a `Scanner` to read an integer `n`, calculates its reverse by repeatedly taking the last digit and building a new number, and then compares the original number with its reverse. The program includes an assertion to ensure the reverse of 787 is 787.

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

The console output shows the result of the test run:

```
<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 a failed test run due to an assertion error.

```
<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.