

27. JUNIT TESTING TO CHECK WHETHER THE GIVEN STRING IS GETTING REVERSED OR NOT

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AIM

To Perform Junit Testing to Check Whether the given string is getting Reversed or not

PROGRAM

```
package sse;

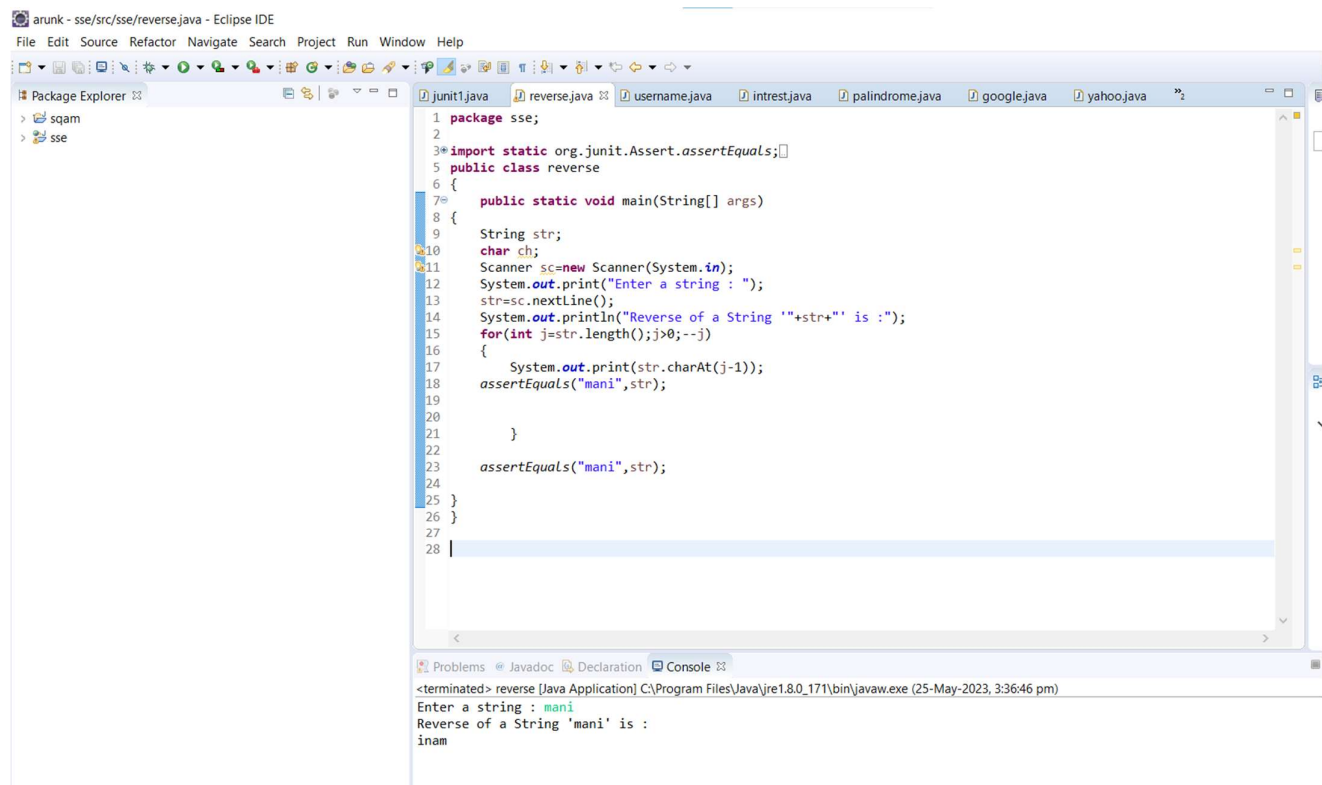
import static org.junit.Assert.assertEquals;
import java.util.Scanner;

public class reverse
{
    public static void main(String[] args)
    {
        String str;
        char ch;
        Scanner sc=new Scanner(System.in);
        System.out.print("Enter a string : ");
        str=sc.nextLine();
        System.out.println("Reverse of a String '"+str+"' is :");
        for(int j=str.length();j>0;--j)
        {
            System.out.print(str.charAt(j-1));
            assertEquals("mani",str);

        }

        assertEquals("mani",str);
    }
}
```

OUTPUT

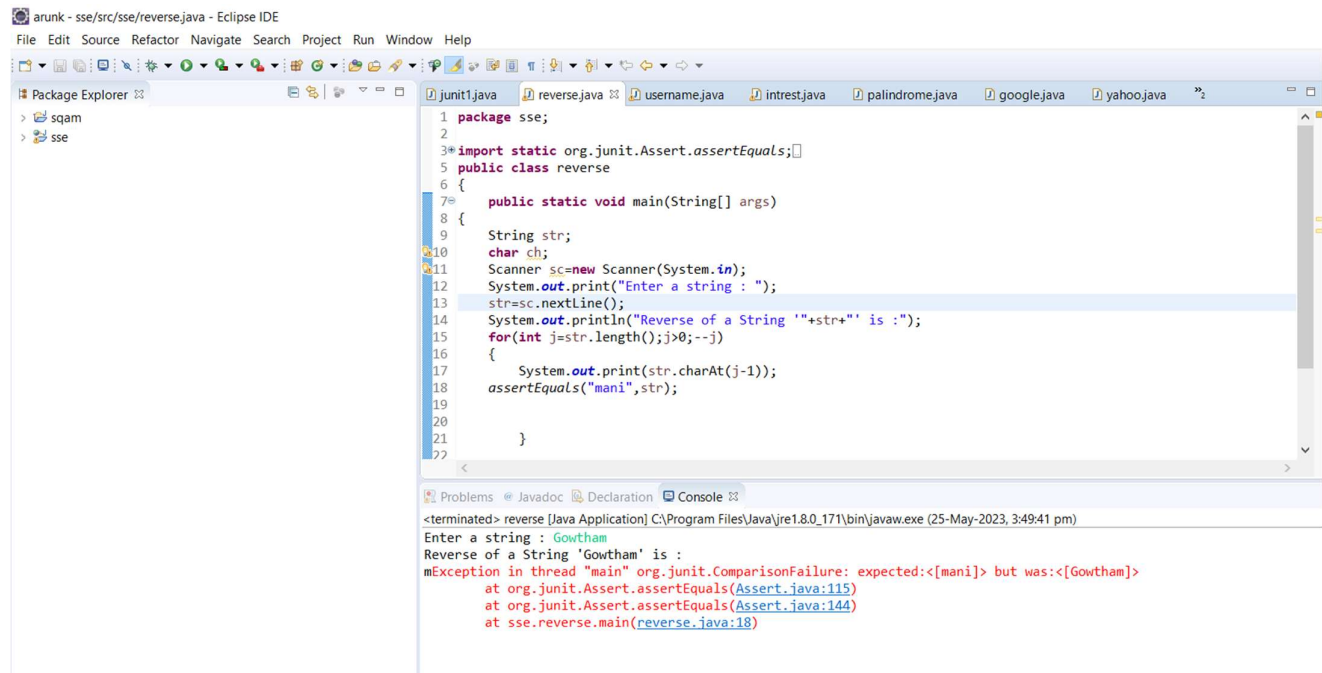


The screenshot shows the Eclipse IDE with the 'reverse.java' file open. The code defines a package 'sse' and a class 'reverse' with a 'main' method. The 'main' method prompts the user to enter a string, reads 'mani', and prints its reverse 'inam'. A JUnit test is run, and the console output shows the program executed successfully, printing 'inam'.

```
1 package sse;
2
3 import static org.junit.Assert.assertEquals;
4
5 public class reverse
6 {
7     public static void main(String[] args)
8     {
9         String str;
10        char ch;
11        Scanner sc=new Scanner(System.in);
12        System.out.print("Enter a string : ");
13        str=sc.nextLine();
14        System.out.println("Reverse of a String '"+str+"' is :");
15        for(int j=str.length();j>0;--j)
16        {
17            System.out.print(str.charAt(j-1));
18            assertEquals("mani",str);
19        }
20
21        assertEquals("mani",str);
22    }
23 }
24
25 }
26
27
28
```

Console Output:

```
<terminated> reverse [Java Application] C:\Program Files\Java\jre1.8.0_171\bin\javaw.exe (25-May-2023, 3:36:46 pm)
Enter a string : mani
Reverse of a String 'mani' is :
inam
```



The screenshot shows the Eclipse IDE with the 'reverse.java' file open. The code is identical to the previous one. However, the JUnit test is run with the input 'Gowtham'. The console output shows a 'ComparisonFailure' exception because the expected string 'mani' does not match the actual output 'Gowtham'.

```
1 package sse;
2
3 import static org.junit.Assert.assertEquals;
4
5 public class reverse
6 {
7     public static void main(String[] args)
8     {
9         String str;
10        char ch;
11        Scanner sc=new Scanner(System.in);
12        System.out.print("Enter a string : ");
13        str=sc.nextLine();
14        System.out.println("Reverse of a String '"+str+"' is :");
15        for(int j=str.length();j>0;--j)
16        {
17            System.out.print(str.charAt(j-1));
18            assertEquals("mani",str);
19        }
20
21    }
22 }
23
```

Console Output:

```
<terminated> reverse [Java Application] C:\Program Files\Java\jre1.8.0_171\bin\javaw.exe (25-May-2023, 3:49:41 pm)
Enter a string : Gowtham
Reverse of a String 'Gowtham' is :
mException in thread "main" org.junit.ComparisonFailure: expected:<[mani]> but was:<[Gowtham]>
    at org.junit.Assert.assertEquals(Assert.java:115)
    at org.junit.Assert.assertEquals(Assert.java:144)
    at sse.reverse.main(reverse.java:18)
```

RESULT

Hence the JUnit Testing to Check Whether the given string is getting Reversed or not performed successfully.