

## 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 file `reverse.java` open. The code defines a package `sse` and a class `reverse` with a `main` method. The `main` method uses `Scanner` to read a string, prints it, and then prints its reverse. A JUnit `assertEquals` test is performed on the reversed string. The console output shows the program running successfully with the input `mani` and the expected output `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()-1;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 file `reverse.java` open. The code is identical to the previous one, but the input string is `Gowtham`. The console output shows a `RuntimeException` due to a `ComparisonFailure` in the `assertEquals` test, indicating that the reversed string `manhtowG` does not match the expected string `mani`.

```
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()-1;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, 3:49:41 pm)
Enter a string : Gowtham
Reverse of a String 'Gowtham' is :
manhtowG
Exception 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.