

Exp-no: 11 Demonstrates the working of JUnit to reverse a word and using assert statement for proof of value.

Aim: To working of JUnit assert statements by comparing the reversed value with expected one.

Program:

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

class SavithaTest {
    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 string: ");
        for (int i = str.length(); i > 0; --i)
        {
            System.out.print (str.charAt (i-1));
            assertEquals ("manu", str);
        }
        assertEquals ("manu", str);
    }
}
```

output: input

manu

actual output

inam

Test cases:

Test case no : 1

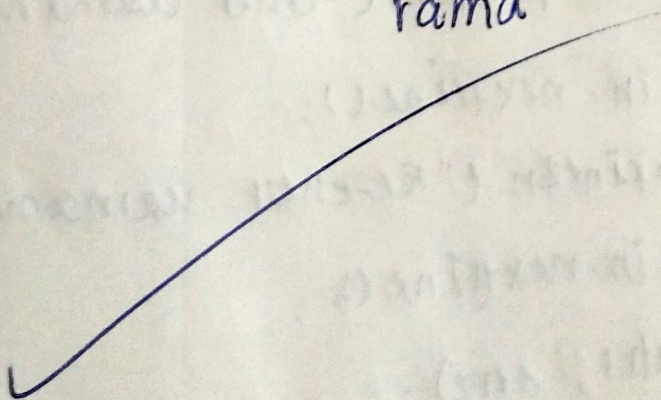
Test case name: Expected one same as actual one.

	Expected output	Actual output	Remarks
Input: Mani	imam	inam	SUCCESS

Test case no: 2

Test case name: Expected one same as actual one

	Expected output	Actual output	Remarks
Input: amar	rama	rama	SUCCESS



EXPRO:12 Write a white box testing code to string comparison of word and using assert statement to prove the value;

Aim: To understand the working of unit assert statements by comparing two strings.

Program:

```
import static org.junit.Assert.assertEquals;
import java.util.Scanner;
public class Third {
    public static void main (String[] args)
    {
        Scanner in = new Scanner (System.in);
        System.out.println ("enter username:");
        String str1 = in.nextLine();
        System.out.println ("Re-enter username:");
        String str2 = in.nextLine();
        assertEquals (str1, str2);
    }
}
```

output:

Enter username:

Ame

Re Enter username:

Ame

Expected output

Ame

Actual output

Ame

Result.

Success

Exp - m : 13 Write a junit code for voting system and use assert statement and verify for testing.

Aim : To understand the working of JUnit True statements by checking the voting age.

Program ;

```
import static org.junit.Assert.*;
import java.util.Scanner;

class JUnit {
    public static void main (String[] args)
    {
        int age, shrt;
        Scanner scan = new Scanner (System.in);
        System.out.println ("Please enter your age : ");
        age = scan.nextInt();
        if (age > 18 {
            System.out.println ("Welcome to voting system  
You can vote");
        }
        else {
            shrt = (18 - age);
            System.out.println ("Sorry, you can vote after:  
" + shrt + " years");
            Assert.assertTrue (age == shrt);
        }
    }
}
```

999

Output: Enter your age 19
Welcome to voting system you can vote.
Please Enter your age: 15
Sorry, you can vote after 3 years

Exp no: 14 Write a program to calculate simple interest.

Aim: To write program to calculate simple interest based on percentage rate condition.

Program:

```
import static org.junit.Assert.*;
import java.util.Scanner;
class interest {
    public static void main (String[] args)
    {
        Scanner sc = new Scanner (System.in);
        float P = sc.nextFloat();
        float R = sc.nextFloat();
        float T = sc.nextFloat();
        float SI = (P * T * R) / 100;
        System.out.println ("Simple Interest = " + SI);
        assertEquals (3600, SI);
    }
}
```

outputs:

600

600

Simple Interest = 3600.0

600

60

3

Simple Interest = 1080.0

Exp-no: 15 check whether the given number is
palindrome or not and output value
should verify with box testing.

Aim: To check whether given number is
palindrome or not and verify with box
testing
program.

```
import java.util.Scanner;  
import static org.junit.Assert.*;  
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");  
        else {  
            System.out.println (sum + " is  
                not palindrome");  
        }  
    }  
}
```


787

787 is palindrome!

123

341

341 is not palindrome