

EXP NO: 11

Demonstrate the working of JUnit to reverse a word and using assert statement for proof of the value

Aim:-

To understand the working of JUnit assert statements by comparing the reversed value with expected one

```
import static void main(String[] args)
class saveethaTest
{
    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 i = str.length() - 1; i >= 0; i--)
        {
            System.out.print(str.charAt(i));
            assertEquals("mani", str);
        }
        assertEquals("mani", str);
    }
}
```

OUTPUT

Input Actual Output

manî înam,

Test Cases :

Test case no : 1

Test case name : Expected one same
as actual one.

Input	Expected output	Actual output	Remarks
manî	înam	înam	SUCCESS

EXP No: 12

Write a white box testing code (JUnit) to string composition of word and using assert statement for proof the value

Aim:- To understand the working of JUnit assert statements by composing two strings.

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

public class trixib {
    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);
        System.out.println("Enter the username");
        String str1 = in.nextLine();
        System.out.println("Reenter the username");
        String str2 = in.nextLine();
        assertEquals(str1, str2);
    }
}
```

EXP NO: B

Write a junit code for voting system and uses assert statements, verify the white box testing.

Aim:-

To understand the working of Junit True statements by checking the voting age.

```
import static org.junit.Assert.*;
import java.util.Scanner;
class Four
{
    public static void main (String[] args)
    {
        int age, short;
        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");
        }
        else
        {
            short = (18 - age);
            System.out.println ("Sorry, you can vote after: " + short + " years");
            assertTrue (age == short);
        }
    }
}
```


EXP NO: 14

Write a program using function to calculate the simple interest. Suppose the customer is a senior citizen. He is offered 12 percent rate of interest; for all other customers, the ROI is 10 percent. The output values should verify using white box testing.

Aim:-

Write a program that calculates the simple interest based on the percentage rate conditions and verify the result using assertTrue code.

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

```
{
```

```
    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);

```

```

assert True (9600 == SI);
}

```

3.

EXP NO: 15

Check whether the given number is palindrome or not and verify the output values should verify using white box testing.

Aim:- To check whether the given number is palindrome or not and verify the result using assertTrue Code.

```
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 ("87 == sum");
        if (temp == sum)
            System.out.println ("is palindrome")
        else
            System.out.println ("Not palindrome")
    }
}
```

EXP NO:16

Write a program to convert decimal number equivalent to Binary numbers and octal numbers? The output values should verify using white box testing?

Aim: To convert Decimal number to its equivalent binary number and octal number and the output values verified using Assert code.

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

```
class binary
```

```
{
    public static void main (String[] args)
    {
        Scanner in = new Scanner (System.in);
        // decimal number
```

```
int decimal = in.nextInt();
```

```
// convert decimal to binary
```

```
String binary = Integer.toBinaryString (decimal);
```

```
System.out.println ("BINARY is " + binary);
```

```
// convert decimal to octal
```



```
system.out.print("OCTAL is ");  
System.out.println(Integer.toOctalString  
(decimal));
```

```
//assertEqual("1100", binary);
```

```
assertTrue(14 == decimal);
```

3.