Ex:- 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 org.junit.Assert.assertEquals;
import java.util.Scanner;
class Saveetha Test
{
    public static void main (String[]args)
{
    String str;
    char ch;
    Scanner sc = new Scanner (System.in);
    System.out.print ("Enter a string :");
    str = sc.next line ();
    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

Input	Actual output
mani	inam

Test cases:

Test case no : 1

Test case name : Expected one Same as actual one

Input = mani	Expected output	Actual output	Remarks
	inam	inam	Success

Test case no: 2

Test case name : Expected one Same as actual one

Input = Aman	Expected output	Actual output	Remarks
	rana	r	FAILURE

Ex: 12

Write a white box testing code (junit) to string Comparison of word and using assert statement for Proof the value

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

```
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 the user name");
      string str1 = in.nextline ();
    System.out.println ("Reenter the user name");
    string str2 = in.next.line ();
    assertEquals (str1, str2);
      }
}
```

Exp-13

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

Aim: To understand the working of Junit True statements

checking the voting age.

```
Import static org. junit . Assert . assert True;
Import Java. util scanner;
  class fan
  {
   public static valid main (string Jargs)
   {
   int age, shrt;
Scanner scan = new Scanner (system. in);
System. out. print In ("please enter your age");
 age = scan. next In t();
 if (age >= 18)
 {
System. out. print In ("welcome to voting system Yo can vote");
 }
else
{
      shrt = (18 - age)
System. out. print In ("Sorry. You can vote after:" + shrt + "years");
assert True (age == shrt);
}}}
```

Exp-14

Write a program using function to calculate the simple interest. Suppose the customers is a senior citizen. He is being 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 assert True code.

```
Import static.org.junit.Assert.assertTrue;
Import Java.util.scanner;
class intrest
{
    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(a)"+SI);
    assertTrue(3600==SI);
    }
}
```

Exp-15

Check the 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 assert True 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 = int.next();
    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");
  }
}
```

Exp-16

Write a program to convert Decimal number equivalent to Binary number and octal numbers? the output value should verify using white box testing?

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

```
Import static org. junit. Assert assert true;
Import java. util scanner
class binary
{
  public static void main (string [] args)
  { Scanner in = new Scanner (system.in);
    # int decimal = in.nextInt();
    string binary = Integer. to Binary string (decimal);
    System.out.println ("BINARY IS"+ binary);
    system.out. print ("OCTAL IS");
    System.out.println (Integer to octal string (decimal));
    assert True (in == decimal);
  }
}
```