Demostrate the working of junit to reverse a word assert statement for proof of the value.

Aim:- To understand the working of junit assert statement 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(str[]args)
{
   string str;
    char ch;
 Scanner sc=new Scanner(System.in);
System.out.print("Enter a string:");
str=sc.nextline();
System.out.print("Reverse of a string"+str+"is:"
for(int=str.length();j>0;--j)
{
     System.out.print(str.charAt(j-1));
assert Equals("mani",str);
        {
      assert equal("mani",str);
  }
}
```

Output

Input	Actual output
mani	ianm

Test case1

Test case no: 1

Test case name: Expected one same as as actual one.

Input = mani	Expected output	Actual output
	inam	inam

Remarks

Success

Test case no: 2

Test case name: Expected one same as actual one

Input = Amar	Expected output	Actual Output
	rama	r

Remark

FAILURE

EXP NO: 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 statement by comparing two string.

```
import static org.junit.Assert.assertEqu
import java.util.Scanner;
Public static class tuvid1
public static void main (String[] arg
{
Scanner in = new Scanner (System.in)
    System.out.println("enter the use
                        name");
String str1 = in.nextline();
System.out.println("Reenter the user
                        name");
String str2 = in.nextline();
assertEquals(str1, str2);
    }
}
```

Exp No: 13

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

Aim: To understand the working of Junit true statement by checking the voting age.

```
import static.org.junit.Assert.true;
import Java.util.Scanner;
Class four.
{
public static void main(string[]arg)
{
int age,shrt;
 Scanner scan = newscanner(system.in);
System.out.println("please enter your age
age =scan.nextInt();
  if (age>=18)
{
system.out.println("welcome to voting
                    System youcan vote");

{
else
{
  shrt=(18-age);
system.out.println("sorry.you can vot
  after:"+shrt+"year");
  assertTrue(age==shrt);
   { { }
```

EXP NO: 14

Write a program using function to calculate the simple interest. Suppose the customer 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 condition 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
                            ="+SI);
    assertTrue(3600==SI);
    }
}
```

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 ascert true code

```
import java.util.scanner;
import static org.junit.Assert.ascertTrue;
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(n+" is
                    palindrome num");
```

```
else
    System.out.println("sum" is
        not palindrome number");
}
}
```

Exp No:16

write a program to convert decimal number equivalent to Binary number and Octal number? The output value should verify white box testing.

Aim:- To convert the decimal number to its equivalent binary number and octal number and the output value verified using Assert code.

```
import static org.junit.Assert.assertTrue;
class binary
{
    public static void main (String[]args)
    { Scanner in=new Scanner(System.in);
    int decimal=in.nextInt();
```

```
string binary = integer.toBinaryString(decimal);
System.out.println("BINARY is "+binary);
System.out.print("OCTAL is ");
System.out.println(Integer.toOctalString(decimal));
assertTrue(14==decimal)
  }
}
```