Ex: -17

Write a Java program to Convert a Given number of Days in Terms of years, Weeks and Days. The output values using white box testing.

Aim:

```
Import static org.junit.Assert.assertTrue;
Import java.util.Scanner;
public class year
{
   public static void main (String args[])
   {
      int m, year, week, day;
      Scanner s = new Scanner (System.in);
      System.out.print ("Enter the number of days:");
      m = s.nextInt();
      year = m/365;
      assertTrue (2==year);
      System.out.println ("No.of years:" +year);
     week = m/7;
    m = m%7;
   System.out.println ("No.of weeks:"+week);
   day = m;
   System.out.println ("No.of days:" +day); }
   }
```

ex:- 18

Find the factorial of n? The output values should verify using white box testing?

Aim:

```
Import static org.junit.Assert.assertTrue;
import java.util.Scanner;
class factorial
{
public static void main (String[] args)
{
int i,pr=1;
try{
Scanner s=new Scanner (System.in);
System.out.println("Enter the number to find the factorial");
int n=s.nextInt();
If (n<0)
{
System.out.println("Invalid");
}
else if(n==0)
{
System.out.println("1");
}
else
{
for(i=n;i>0;i--)
{
pr=pr*i;
}
System.out.println("The answer is:"+pr);
assertTrue(120==pr);
}}
catch (Exception e)
{
System.out.println("In valid");
}}}
```

Ex:-19

Find the year of the given data is Leap year or not. The output values should verify using white box testing?

Aim:- To find the years of the given data is Leap years or not and the result is verified using white box testing.

```
Import static org.junit.Assert.assertTrue;
Import Java.util.Scanner;
class leapyear
{
 public static void main (String[]args)
 {
 int i=0;
System.out.println("Enter the date/month/year");
Scanner s= new Scanner(System.in);
String re = s.next();
String []r= re.split("/",3);
int x = Integer.parseInt(r[2]);
assertTrue(x==2000);
if (x%4==0)
{
System.out.println("It is an leap year");
}
else {
System.out.println("It is not a leap year:");
 }
}
}
```

Ex :- 20

Write program to find the square, cube of the given decimal number. The output values should verify using white box testing.

Aim: To write a program to find the square, cube of the given decimal number the output values should verify using white box testing

```
Import static org.junit.Assert.assertTrue;
Import java.util.Scanner;
public class cubeSquare{
public static void main(String[]args)
{
try{
Scanner s=new Scanner(System.in);
System.out.println("Enter an anumber");
double n=s.nextDouble();
double a=0,b=0
a=n*n;
b=n*n*n;
System.out.println("The square of number="+a);
System.out.println("the square of number="+b);
}
catch(Exception e)
{
System.out.println("Invalid");
}
}
assertTrue(expected output==a);
assertTrue(expected output==b);
}
```