What is BLC and ELC class ?

BLC :
------
* It stands for **"Business Logic class"**.
* Here, developer is responsible to write the Business Logic.
* This BLC class does not contain **main method**.
* The main purpose of this BLC class to reuse our java classes into different packages.
  Example :
  public class Calculate
  {

  }

ELC :
------
* It stands for **"Executable Logic class"**.
* It must contain **main method** because the execution of the program starts from ELC class.
  Example :
  public class ELC
  {
    public static void main(String [] args)
    {

    }
  }

//Program on BLC and ELC :

Here we have 2 packages :
------
com.rev.blc
com.rev.elc

Calculate.java(BLC) [Available in com.revl.blc]

```
package com.revl.blc;

public   class Calculate
{
    public static void dosum(int x, int y)
    {
        System.out.println("Sum is :"+(x+y));
    }
}
```

Rectangle.java (BLC) [Available in com.revl.blc]

```
package com.revl.blc;

public class Rectangle
{
    public static void getAreaOfRect(int length , int breadth)
    {
        System.out.println("Area of Rectangle is :"+(length* breadth));
    }
}
```

* These two BLC classes we want to use in another package i.e com.rev.elc so, We need to import
  both the classes as shown below :

```
package com.revl.elc;

import com.revl.blc.Calculate;
import com.revl.blc.Rectangle;

public class ELC
{
    public static void main(String[] args)
    {
        Calculate.dosum(12, 24);
        Rectangle.getAreaOfRect(2, 5);
    }
}
```

How to reuse a class in Java ?

The slogan of java is "WORA" write once run anywhere.

A public class created in one package can be reuse from different packages also by using import
statement. [one public classes will be available from the same package only]

In a single java file, we can declare only one public class that must be our .java file and that class
can be reusable to all the packages.

*In a single java file, we can write only one public class and multiple non-public classes but it is not a
recommended way because the non public classes we can use within the same package only.

So the conclusion is, we should declare every java class in a separate file to enhance the reusability of
the BLC classes.
[Note:If we have 10 classes --> 10 java files]

How many .class file will be created for the following program:

For a public class in a single file, Only 1 .class file will be created.

For a public class in a single file which contains n number of non public classes then compiler will
generate n number of .class file.

  Example :
  ----
  public class Test
  {
  }

  class A
  {
  }

  class B
  {
  }

  class C
  {
  }

Here 4 class file will be created.

Note : creation of .class file does not depend upon public OR non public classes.

Working with Static Method with different return type :

How to provide formatting for decimal number :

There is a predefined class called DecimalFormat available in java.text
package. It is useful to provide formatting for the decimal numbers as
shown below :

DecimalFormat df = new DecimalFormat("00.00");//String format

This DecimalFormat class contains a non static method called format()
which accepts double as a parameter and return type is String.

public String format(double x)

```
package com.revl.blc;

import java.text.DecimalFormat;

public class Circle
{
    public static void getAreaOfCircle(double radius)
    {
        double area = Math.PI * radius * radius;

        DecimalFormat df = new DecimalFormat("00.00"); //format
        String areaOfCircle = df.format(area);
        System.out.println("Area of circle is :"+areaOfCircle);
    }
}
```

```
package com.revl.elc;

import java.util.Scanner;

import com.revl.blc.Circle;

public class Sell2circlrea
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter the radius :");
        double rad = Double.parseDouble(sc.nextLine());

        Circle.getAreaOfCircle(rad);
        sc.close();
    }
}
```