Exercises

1. Create class **Point** with the following instance variable and methods.
    Instance variable: private int x,y
    Constructors : public Point(), Point(int x, int y)
    Methods: public void setX(int x), setY(int y), setXY(int x, int y)

2. Write a program to create a class: **Employee.** An Employee has both attributes and methods. Create an interface **Payable**. It has only one method. Another interface **Payable2** has two methods, one is from **Payable**. Create a class that has all properties and methods of Employee, Payable, and Payable2.

3. Suppose, you have three classes. All of them have to maintain certain behaviors. How can you achieve this? Write a program to implement the concept.

4. If the above question (Q. 3) changed to the following way:

    Suppose, you have three classes. All of them have some common states and behaviors. But they perform the behaviors differently. How can you achieve this? Write a program to implement the concept.

5. Write a program to create an interface named **Squarable**. This interface has a method named **square** which takes an argument of primitive type. Implement this interface in the **Arithmetic** class. Arithmetic class 4 methods (add, subtract, multiply, divide) which takes two arguments of primitive type. Create a new class called **Demo** which has methods of arithmetic and squarable along with 2 other methods (isPrime, isEven).