A point can be characterized by x and y coordinates. Define a class called **MyPoint**.

Instance variables: x // should be **private**

Y //should be **public**

Class variable: noOfObjects //should be private

//keeps track of the number of objects

Three constructors:

One with no arguments

One with one argument. (The argument will initialize the instance variable x)

One with two arguments. (The arguments will initialize the instance variables x and y)

Use **this** keyword where necessary

Setter method

Define a setter method that assigns a value to the variable x

Define a setter method that modifies the value of the static variable

(A setter method is like a normal method that modifies private variables. It does not return anything)

Getter method

Define a getter method that retrieves the value of the instance variable x

Define a getter method that retrieves the value of class variable noOfObjects

(A getter method is like a normal method that retrieves private variables. It returns the value of the variable)

Create a **Driver** class and inside its main method do the following:

Ask the user for the values of both x and y

Create three objects:

The first object should use the constructor without any arguments

The second object should use the constructor with one argument (pass in the user **input**)

The Third object should use the constructor with two arguments (pass in **user inputs**)

After the objects have been created

For the first object use the setter method to assign a value to x. Also just assign y from main

For the second object just assign y from main

As each object is being created increment the static variable by one.

Display the contents of each object along with the static variable. Use the getter methods where necessary.