

Lab-3 Classes and Objects

Objectives

1. Create class and methods
2. Testing classes
3. Accessing instance variables.
4. Use variables and methods

Exercises

1. Given the following class, called [Numero](#), write some code that creates an instance of the class, initializes its two member variables ("a" and "b") using constructors; then displays the value of each member variable.

```
public class Numero {  
    public int a;  
    public float b;  
    //ingrese codigo aqui  
}
```

Sample Output:

```
a = 1  
b = 2.3
```

2. Rewrite the previous program with the condition that the variables a and b are private. Make all changes necessary to run the program. Test the program using another class in different file. Hint: consider created methods getXxx() and setXxx()
3. Write a program in java that computing statistics of a set of numbers. Name the class as "Estadistica". The following methods must be created:

- `getSum()` returns the sum of all the items of the dataset.
- `getMean()` returns the average of all the items.
- `getStandardDeviation()` returns the standard deviation of the items.
- `getMax()` return the largest of all the items that have the dataset
- `getMin()` return the smallest

Test your new class creating two dataset of six numbers (dataset defined as arrays). Also, create two instance of "Estadistica" and assign one dataset. Finally compute the statistic and print the results for every object.