**Deliverables**

Program files for the sales tracking program: SalesTracking.java

At the beginning of all your programs, put a comment box that includes the program name, your name, and a brief description of the program.

**Example:**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Program Name: ProgramName.java**

**Programmer's Name: Student Name**

**Program Description: Describe here what this program will do**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**How to submit your assignment:**

1. The program *must* have the same name as the assignment title (SalesTracking.java).
2. The Java source file (\*.java) must include a corresponding class file (\*.class) program as evidence of success.
3. In addition to the program source code file and byte code file,**complete a LAB REPORT** (see template in doc sharing) that includes information about your design process as well as testing and results (with screen shots of your program output).
4. You must use a zipped folder to send your weekly assignment to the Dropbox. Do not send subfolders within your zipped folder. Place *all* of the .java and .class file for the week into the one zipped folder. The zip folder should be named CIS355A\_YourLastName\_iLab\_Week1, and this zip folder will contain all the weekly programming assignments.

**Required Software**

**Eclipse**

Access the software at [https://lab.devry.edu](https://lab.devry.edu/).

**iLAB STEPS**

**STEP 1: SalesTracking.java**

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You must create a sales tracking program named SalesTracking.java. This program will use arrays to store and process monthly sales as well as compute average yearly sales, total sales for the year, and which month had the highest sales and which month had the lowest sales.  You should use parallel arrays. Your first array (monthArray) should be initialized with all of the months. This array should have 12 locations of course. Your other array should be named monthlySales. Like your monthArray, this array should be 12 locations that store the amount of sales for each month.

The program should prompt the user for the sales for each month starting with January. The arrays (monthlySales and monthArray) should be created in main and passed to the methods as needed.  Your program should have methods that do the following.

* getSales(monthArray, monthlySales): This method receives the monthArray and monthlySales arrays as arguments.  It prompts the users for the sale for each month. This amount should be stored and returned into the corresponding location in the monthlySales array. For example, January sales should be stored in the first location, February sales should be stored in the second location, and so forth.
* computeTotalSales(monthlySales): This method receives the monthly sales array as an argument and returns the total sales of the year.
* computeAverageSales(monthlySales): This method receives the monthly sales array as an argument and returns the average sales for the year.
* computeHighestMonth(monthlySales): This method receives the monthly sales array as an argument. This method will search and compare the values of the monthly sales array for the highest value.  The method will return the index(or location in the array) of the month with the highest value.
* computeLowestMonth(monthlySales): This method receives the monthly sales array as an argument. This method will search and compare the values of the monthly sales array for the lowest value.  The method will return the index (or location in the array) of the month with the lowest value.
* displaySaleInfo(totalSales, averageSales, highestMonth, highestSales, lowestMonth, lowestSales): This method will receive the total yearly sales, average monthly sale, the month with the highest sales, as well as the sales for that month and the month with the lowest sales. This method will display all of the data it received as arguments.
* All methods should be STATIC therefore no object will need to be instantiated to call them.  All methods must be called from the main method. Sales amounts should be rounded to two decimal places. .

Your monthArray should have the following values.

monthArray

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **JANUARY** | **FEBRUARY** | **MARCH** | **.....** | **.....** | **.....** | **NOVEMBER** | **DECEMBER** |

 You should demonstrate the use of loop and decision structures also. Use the lab forum to ask questions about this lab.

|  |  |  |
| --- | --- | --- |
| **SalesTacking** | **Points** | **Description** |
| **Standard header included**  **and Lab Report** | 1 | Must contain program's name, student name, and description of the program |
| **Lab Report** | 9 | Lab Report |
| **Use of methods** | 24 | Implement all methods correctly (4 points each) |
| **Use of arrays** | 6 | Implement arrays correctly |
| **Subtotal** | 40 |  |