

## Level 2: Array Exercises

Note: Provide documentation for each method.

**Part A:** Modify *Level1ArrayExercises*.by changing the following. Save as *Level2aArrayExercises.java*

1. Change the method *findMax* and *findMin* so that the number of occurrences will also be stated.  
 e.g.    The maximum number is 126.            # of occurrences is 1.  
           The minimum number is 2.            # of occurrences is 3.
2. Change the method *search* so that it will determine if a specific number is NOT found in the array.

**Part B:** This is a new program, call it *Level2bArrayExercises.java*. Create a menu driven program that will run any method described below. Use only local variables, i.e. pass values via parameters.

1. Write a procedure called *countOccurrences* which will prompt the user to enter a natural number from 1 to 10 (stop entering numbers when the user enters a number outside the range). The procedure will output the number of the times each number was entered.

e.g.    Enter a number: 5  
           Enter a number: 2  
           Enter a number: 3  
           Enter a number: 2  
           Enter a number: 2  
           Enter a number: -5

Number	# of occurrences
1	0
2	3
3	1
:	:
10	0

2. Add method *countOccurrences2* which is identical to *countOccurrences* except that it counts numbers between 15 and 25 inclusive.
3. Add a method called *totals* which will prompt the user to enter whole numbers from 0 to 99 (stop entering numbers when the entered number is outside the range). The method will output the total (sum) of all numbers entered less than 10, the total of all numbers entered in the teens (10 to 19), the total of all numbers entered in the 20s, ... and the total of all numbers entered in the 90s.