

## Level 1 Array Exercises

Create a menu driven program that will run any method described below. Save as **Level1ArrayExercises.java** Note: Provide documentation for each method.

1. Declare an array to store 10 integers.
2. Write a method called **initializeArray** which will assign the value -1 to every element of the array.
3. Add a method called **enterFromKeyboard** which will enter **UP TO 10** integers and store them in the array.
4. Change the main method, so that it will call the first two methods (*initializeArray* and *enterFromKeyboard*) then display the menu.
5. Add a method called **countWhole** which will calculate and display the number of whole numbers entered into the array. (Positive integer values)
6. Add a method called **display** which will display the list of inputted integers in the order entered.  
e.g. The integers in order entered is 8 12 32 43 14 12.
7. Add a method called **displayReverse** which will display the list of inputted integers in reverse order entered.  
e.g. The integers in reverse order is 12 14 43 32 12 8.
8. Add a method called **sum** that will calculate and display the sum of all the numbers entered.
9. Add a method called **average** that will calculate and display the average of all the numbers entered correct to 1 decimal place.
10. Add 2 methods called **findMax** and **findMin** which will calculate and display the maximum number and the minimum number stored in the array respectively.
11. Add a methods called **search** that will display the position(s) in the array a specific number occupies.  
e.g. The number 12 is found in the following positions: 2, 5
12. Add a loop so that the user can make other choices from the menu for the numbers that the user entered.

Save all exercises. When done, submit your programs on the D2L.