## **CSCI-101 Programming 1**

## Week of Oct 9 - Lab 8a

## **INSTRUCTIONS**

Log into <u>cs.bridgewater.edu</u> and navigate to your **labs** directory. Make a directory named **lab8** and include the files for this lab in the **lab8** directory.

Write a class named **Lab8a** that contains the following:

- A method named **print** that takes an array of integers as an argument and prints each integer in the array to the screen on a single line with spaces between them. After all of the elements have been printed, a new line character is printed to the screen.
- A method named populateFromKeyboard that has a single parameter that holds an array of
  integers. The method creates a scanner, asks the user to enter a the number of integers equal
  to the length of the array, reads the values from the keyboard and stores them in the array,
  then closes the scanner.
- A method named **getMax** that takes an array of integers as an argument and returns the largest value in the array.
- A method named **getMin** that takes an array of integers as an argument and returns the smallest value in the array.
- A method named **getMeanAverage** that takes an array of integers as an argument and returns the mean average of the elements in the array.
- A method named main that does the following:
  - Declares an array named array that can hold 5 integers.
  - Populates the array by calling populateFromKeyboard.
  - Prints the elements in the array by calling **print**.
  - Uses **getMax** and prints to the screen "**Max:** " followed by the largest element in the array.
  - Uses **getMin** and prints to the screen "**Min:** " followed by the smallest element in the array.
  - Uses **getMeanAverage** and prints to the screen "**Mean:** " followed by the mean average of the elements in the array.