

# CSCI-101 Programming 1

## Week of Sep 18 - Lab 5

### INSTRUCTIONS

Log into [cs.bridgewater.edu](https://cs.bridgewater.edu) and navigate to your **labs** directory. Make a directory named **lab5** and include the files for this lab in the **lab5** directory.

### Let's Code

Create a class named **Lab5** and include in the class the following:

A method named **printArray** that has a single parameter. The parameter is an array of integers named **arr**. The method prints the elements in **arr** to the screen on a single line with spaces between the elements. After the elements have been printed to the screen, print a new-line character.

A method named **getElement** that has two parameters. The first parameter is an array of integers named **arr** and the second parameter is an integer named **i**. The method returns the integer in **arr** whose position is in the parameter named **i**.

A method named **setElement** that has three parameters. The first parameter is an array of integers named **arr**, the second parameter is an integer named **i**, and the third parameter is an integer named **v**. The method sets the element in **arr** whose position is in the parameter named **i** to the value stored in the parameter named **v**.

A method named **main** that does the following:

- Declare an array of integers named **array** that can hold 10 integers.
- Print the contents of **array** by calling **printArray**.
- Ask the user to enter 10 integers from the keyboard.
- Read the integers from the keyboard and store them in **array**.
- Print the contents of **array** by calling **printArray**.
- Print to the screen "Let's get a value from the array."
- Ask the user to enter the index of the element they wish to retrieve.
- Read the integer from the keyboard and store it in a variable named **index**.
- Declare a new variable named **elm** and set it equal to the value of the element in **array** whose index is stored in **index** by calling the **getElement** method.
- Print to the screen the value stored in the variable named **elm**.
- Print to the screen "Let's change a value in the array."
- Ask the user to enter the index of the element they wish to change.
- Read the integer from the keyboard and store it in a variable named **index**.
- Ask the user to enter the value that they want to store in the array.
- Read the integer from the keyboard and store it in a variable named **value**.
- Change the value of the element in **array** whose index is stored in **index** to the integer that is stored in **value** by calling the method named **setElement**.
- Print the contents of **array** by calling **printArray**.