

CSCI-101 Programming 1

Lab 8

Log into cs.bridgewater.edu. Change your working directory to your **labs** directory in your repository and make a directory named **lab8**. Inside the **lab8** directory create a file named **Exam2.java** that satisfies the following:

Write a method named **printArray** that takes an array of integers as an argument and prints the elements in the array that is passed into the method to the console on a single line with spaces between them.

Write a method named **main** that includes the following:

1. Write a statement that declares an array named **array1** that can hold 100 integers. Print the contents of **array1** to the console by calling **printArray**.
2. Write a statement that stores the value **7** in the 3rd element of the array named **array1**. Print the contents of **array1** to the console by calling **printArray**.
3. Write a statement that declares a variable named **value** and initializes it to value of the 7th element in the array named **array1**. Print to the console "**Value:** " followed by the value in variable named **value**.
4. Write a fragment of code that asks the user to enter 100 integers separated by spaces, reads the values entered by the user, and stores them in the array named **array1**. Print the contents of **array1** to the console by calling **printArray**.
5. Write a fragment of code that declares a variable named **sum** and stores in it the sum of the elements in the array named **array1**. Print to the console. "**Sum:** " followed by the value in **sum**.
6. Write a fragment of code that declares a variable named **count** and stores in it the number of even integers in the array named **array1**. Print to the console "**Count:** " followed by the value in **count**.
7. Write a fragment of code that stores in the array named **array1** the values in the interval **[101-200]**. Print the contents of **array1** to the console by calling **printArray**.
8. Write a statement that declares a 2x40 2-dimensional array of integers named **matrix1**. Print to the console the contents of **matrix1**.
9. Write a fragment of code that sets all of the elements in **matrix1** to random integers between 0 and 19 (inclusively). Print to the console the contents of **matrix1**.
10. Write a statement that declares a variable named **elm** and stores in it the value of the element in the first row and first column of **matrix1**. Print to the console "**Elm:** " followed by the value in **elm**.
11. Write a statement that sets the element in the last row and last column of **matrix1** to 0. Print to the console the contents of **matrix1**.