CSCI-101 Programming I
Exam 2

Instructions

- Once you leave the testing room you cannot return to continue working on the exam.

If you need to use the restroom, please use it now.

- Please leave all notebooks and electronics (**including cell phones and smart watches**) at the front of the room.
- This is a closed book/closed notes exam.
- **Do not spend too much time on any one problem.** You have 50 minutes to complete this exam.
- Partial credit is awarded.
- Please write legibly. If I cannot read your answers, I cannot give you credit.
- Please write your answers **in the order specified**. If you need additional paper, please raise your hand to ask your instructor for additional paper.
- Your code must be written to behave as specified.
- You must properly use all identifiers that are explicitly stated.
- Please use proper and consistent coding conventions (spacing, naming identifiers, etc.).
- Please stay in your seat until you are ready to hand in your exam. You may leave when you are finished.

Assume the code you are writing for this exam is placed in a file named **Exam2.java.** Write a complete program that satisfies the Program Requirements shown below.

In **main**, do the following:

1. Declare a variable named **kb** and initialize it to an instance of the **Scanner** class that can read from the keyboard.

2. Write a single statement that declares an array named **arr1** containing the values **2**,**4**,**6**,**8**, and **10**.

3. Write a statement that changes the second element in **arr1** to the value **7**.

4. Write a statement that declares an array of Strings named **arr2** that can hold **100** Strings and contains the default values.

5. Write a fragment of code that asks the user for a String, reads the value from the keyboard, and stores the String read from the keyboard as the last element in **arr2**.

6. Write a statement that declares a variable named **isHello** and uses the **?:** operator to initialize the variable to **true** if the last String in **arr2** is equal to "**hello**", otherwise the variable is initialized to **false**.

7. Write a fragment of code that declares an array of integers named **arr3** and sets the values in **arr3** to the values **1** through **100**.

8. Write a fragment of code that declares an array of integers named **arr4** and initializes the array to hold the first 100 non-negative multiples of **7** (i.e. 0, 7, 14, 21, 28, …).

9. Write a fragment of code that declares a variable named **sum** and initializes it to the sum of the integers held in **arr4**.

10. Write a fragment of code that copies the values in **arr4** into **arr3**.

11. Write a statement that declares a variable named **maxValue** and initialize it to the largest value in **arr4** by calling the method named **max** (described below).

Outside of **main** do the following:

12. Write a method named **max** that takes an array of integers as an argument and returns the largest value in the array that is passed to the method.