ICS4U1 COMPUTER SCIENCE

## **Level 3: Array Exercises**

For the following tasks create a program and call it *Level3aArrayExercises.java*. Create a menu driven program that will run any method described below.

- 1. Create a method called **noDuplicates** which will prompt the user to enter 7 unique integers. As the user enters the numbers, ask them to re-enter a number if it has been entered previously. Output the 7 unique numbers.
- 2. Create a method called *randomNoDuplicate*s which will output 10 unique integers all which fall within a specified range.
- 3. Create a method called *enterAndCount* that will ask the user to enter 4 numbers (allowing no duplicates) from 1 and 100 that they want to look for and count. The program will then open a text file (the user should enter the filename) and count the number of times those numbers appear in the text file. Output each number and the number of asterisks (\*) equal to the number of times that number was found in the text file. Output the number which had the most asterisks associated with it.

e.g. 9: \*\*\*\*\*\*
22: \*\*
57:
77: \*\*\*

The most common number chosen was 9.

- 4. Five divers are to compete in a diving competition. Create a method called *randomOrder* which will output the names of these 5 divers in a random diving order.
- 5. Create a method called **threeRandomOrder** which will output 3 random orders with different divers going first and last each time. There are 5 divers as above.

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