

CSCI 220 -- PA 1

Review Basic C++/Java & Development Environment

Feel free to discuss and help each other out but does not imply that you can give away your code or your answers! Make sure to read all instructions before attempting this lab. You cannot work with a lab partner for this assignment.

You must use an appropriate provided template from Canvas or my website (zeus.mtsac.edu/~tvo) and output "Author: Your Name(s)" for all your programs. If you are modifying an existing program, use "Modified by: Your Name(s)".

Review basic programming concepts such as selection, repetition, functions/methods, arrays, and classes.

Explore development environment for C++ or Java and perform the following exercises in either C++ or Java.

Exercise 1 – Write a C++ function or a Java method that takes an array of int values and determines if all the numbers are different from each other (that is they are distinct). Include a driver to test your function/method with at least two test cases: all values are distinct (5, 7, 2, 6, 4) and two or more values are the same (5, 7, 2, 6, 4, 2).

Exercise 2 – P-1.3 Birthday Paradox from your C++ textbook. You should output two columns like the sample output below:

N	Count out of 10
5	0
10	1
...	
100	10

Question 1: What are the purposes of parameters in a function/method?

Question 2: List and describe some important components in a class.

Extra Credit (2 points): Perform Exercise C-1.10 from your C++ textbook. Include a driver to test your function/method with at least two test cases: 3 and 20.

Fill out and turn in the PA submission file for this assignment(save as PDF format).