CSCI-101 Exam 2

You are awesome!

Name _____

Instructions: Problem 1 is the only problem that asks you to write a complete program. For all of the others, write **only** the code that is necessary to answer the problem. You need not include import statements for any of the problems.

If the problem asks you to read from the keyboard use the Scanner declared in Problem 2.

Please write clearly, with proper indentation, and use meaningful variable names.

Rock this exam! You are awesome!

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1. **Driver**
   Write the most simplistic, yet complete, program, in a class of your choosing, that simply prints **Hello World!** to the screen.

2. **Scanner**
   Declare a Scanner that can read from the keyboard.

3. **If-else Block**
   Write a segment of code that reads an integer from the keyboard and uses an if-else block to print **odd** if the integer is odd or print **even** if the integer is even.

4. **?: Operator**
   Write a segment of code that reads a String from the keyboard and uses the ?: operator to print **true** if the string contains more than 5 characters or prints **false** if it does not.

5. **While-loop**
   Write a segment of code that uses a while-loop to print the numbers from 10 to 20, inclusively.

6. **For-loop**
   Write a segment of code that uses a for-loop to print the numbers from 10 to 20, inclusively.

7. **Array Declaration**
   Write a single statement that creates an array named **array1** that is initialized with the integer values 1 through 5.

8. **Array Element Retrieval**
   Write a segment of code that prints the value of each element in an array named **array2**. Do not declare **array2**, simply assume it exists. Do not assume anything about the dimensions of **array2**.

9. **Array Element Modification**
   Write a segment of code that doubles the value of each element in an array of integers named **array3**. Do not declare **array3**, simply assume it exists. Do not assume anything about the dimensions of **array3**.

10. 2D Array Declaration

Write a statement that declares a **5x5** array of integers named **matrix1**.

11. 2D Array Initialization

Write a segment of code that populates **matrix1** (declared in the previous problem) with random integers.

12. 2D Array Element Retrieval

Write a segment of code that prints the sum of the second elements in each row of a 2D array named **matrix2**. Do not declare the 2D array named **matrix2**, simply assume it exists. Do not assume anything about the dimensions of **matrix2**.

13. 2D Array Element Modification

Write a segment of code that sets each element in a 2D array of integers named **matrix3** to -1. Do not declare the 2D array named matrix3, simply assume it exists. Do not assume anything about the dimensions of **matrix3**.

14. Method Definition with Primitive Parameters

Write a method named **sum** that has two integer parameters and returns the sum of the arguments passed into the method.

15. Method Calls

Write a segment of code that reads two integers from the keyboard, passes them to the method named **sum**, and prints to the screen the value returned by **sum**.