Activity 4 Questions

Problem 1 / 3

Using the editor below, write a JavaScript function that is called `myName` that returns a string that contains your name. (For example, if your name was "Alice", this function returns "Alice".)

Problem 2 / 3

Using the editor below, write a JavaScript function that is called `addTen` that takes in one parameter, a number, and returns a number that is ten more than the number that was given.

Problem 3 / 3

Using the editor below, write a JavaScript function that is called `compare` that takes in two parameters, both numbers, and returns the number greater of the two numbers.

Activity 5 Questions

Problem 1 / 5

Using the editor below, write a JavaScript function that is called `area` that returns the area of a circle for a given radius. In doing so, your code must conform to the following specifications:

- The function must take in one parameter that will contain the radius of the circle
- Use to following formula to calculate an area is $A = 3.14 * r * r$

Problem 2 / 5

Using the editor below, write a JavaScript function that is called `calculateGPA` that takes in a letter grade and returns the GPA for the given letter grade.

- The function must take in one parameter that will contain the letter grade as a string (for example, "A")
- The GPA that is returned from the function should follow the following list:
    - A+ or A: 4.0
    - A-: 3.67
    - B+: 3.33
    - B: 3.0
    - B-: 2.67
    - C+: 2.33
    - C: 2.0
    - C-: 1.67
    - D: 1.0
    - F: 0

Problem 3 / 5

Using the editor below, write a JavaScript function that is called `countFailing` that takes in an array of grades and returns the number of failing grades (grades below 70).

- The function must take in one parameter that will contain an array of grades (for example, [100, 90, 100, 50, 80, 60])
- The function must return how many grades are failing, where failing is a grade below 70

Problem 4 / 5

Using the editor below, write a JavaScript function that is called `average` that takes in an array of grades and returns the average of the grades.

- The function must take in one parameter that will contain an array of grades (for example, [100, 100, 70])
- The function must return the average grade. For example, the average of [100, 100, 70] is 90 since 90 = (100+100+70)/3 = 270/3 = 90.

Problem 5 / 5

Using the editor below, write a JavaScript function that is called `compare` that takes in two array of grades and returns "first" if the first student has a higher average or "second" if the second student has a higher average.

- The function must take **two** parameters, both being array of grades. For example, a programmers calling your function might write `first( [100, 80], [100, 100] )`.
- The function must return "first" if the first student (the first array) has a higher average than the second student.
- The function must return "second" if the second student (the second array) has a higher average than the first student.
- You can assume that each student has the same number of grades.

+1 Problem (Problem 6)

Using the editor below, write a JavaScript function that is called `lowestGrade` that takes in an array of grades and returns the lowest grade.

- The function must take in one parameter that will contain an array of grades (for example, [100, 90, 100, 80])
- The function must find the lowest grade from the array and return that grade

A Second +1 Problem (Problem 7)

Using the editor below, write a JavaScript function that is called `calculateTotalGPA` that takes in an array of letter grades and must return the current GPA.

- The function must take in one parameter that will contain an array of letter grades (for example, ["A+", "A-", "C", "B-", "A"])
- The function must find the current GPA (average of all courses). You should assume that all grades are equal (no concept of credit hours).
- The GPA that is returned from the function should follow the following list:
    - A+ or A: 4.0
    - A-: 3.67
    - B+: 3.33
    - B: 3.0
    - B-: 2.67
    - C+: 2.33
    - C: 2.0
    - C-: 1.67
    - D: 1.0
    - F: 0