CS2613: Programming Languages Laboratory (FR02A)
Lab #7 – Fall 2023

Language: JavaScript (#2)
# of Tasks: 1
Topics:
- Strings
- Arrays
- File I/O
- JSON

*All tasks are to be completed individually in line with the academic offense guidelines detailed on the syllabus and are **due before the end of the lab period** unless stated otherwise.*

Task #1

Task Style: Programming
Submission Method: Show to course instructor when complete.

Description:

On D2L, you have been given a series of JSON files labelled calculationsX.json where X is the identifying number of the file. The number of files will not be consistent after each running. Each JSON file contains four calculations: 1 being the true calculation and the other 3 being Abby, Tyson, and Zack. These calculations will always be in the order of True, Abby, Tyson, Zack.

It is your job to write a program that reads from X number of JSON files and ranks the accuracy of performers based on all their calculations, i.e., rank everyone based on who was the closest to the true value. You must parse the JSON file to do so. Print the ranking (closest performer first) and the total sum of distances the performer had from the true values.

Resources:
- Eloquent JavaScript Chapters:
  - 4
- https://nodejs.dev/en/learn/reading-files-with-nodejs/
- https://www.geeksforgeeks.org/how-to-work-with-node-js-and-json-file/
- https://reactgo.com/javascript-convert-string-to-double/

Example Output:
```
1.      Tyson   (10)
2.      Abby    (20.5)
3.      Zack    (40)
```

Above results are not accurate to the files provided.