

ET712 - Assignment 6

Create a JavaScript file (link it to an HTML file), and write code for Part A, B and C:

A. There is a new discipline of the two teams game now, and it works differently!

Each team competes 3 times, and then the average of the 3 scores is calculated (so one average score per team). A team ONLY wins if it has at least DOUBLE the average score of the other team. Otherwise, no team wins!

1. Create an arrow function 'calcAverage' to calculate the average of 3 scores
2. Use the function to calculate the average for both teams
3. Create a function (function declaration) 'checkWinner' that takes the average score of each team as parameters ('avgNets' and 'avgKnicks'), and then logs the winner to the console, together with the victory points, according to the rule above. Example: "Knicks win (30 vs. 13)".
4. Use the 'checkWinner' function to determine the winner for both DATA 1 and DATA 2.

Version 1:

TEST DATA 1: Nets score 44, 23 and 71. Knicks score 65, 54 and 49

TEST DATA 2: Nets score 85, 54 and 41. Knicks score 23, 34 and 27

Version 2 (5 Points Bonus):

Let the user type the 3 scores for each team.

B.

Lucas and John are trying to compare their BMI (Body Mass Index), which is calculated using the formula:

$$\text{BMI} = \text{mass} / (\text{height} * \text{height})$$

mass in kg, height in meter

Steps:

1. Store two persons' mass and height in variables,
2. Create a function (Function Expression) to calculate their BMI accordingly;
3. Log blew message to console:

Lucas' BMI (?) is higher/lower than John's BMI(?)

Testing data:

Lucas, 78kg 1.69m tall

John, 92kg 1.95m tall

Bonus (5 Points): Instead of using testing data above, let users type the mass and height for each person from the website.

C. Use array function and apply ternary operator to rewrite Part B.