

SE Boot Camp Assignment 8

Create a JavaScript file (link it to an HTML file), and write code for below 3 tasks:

A.

Jason wants to build a very simple tip calculator for whenever he goes eating in a restaurant. In his country, it's usual to tip 15% if the bill value is between 30 and 300. If the value is different, the tip is 20%.

1. Your task is to calculate the tip, depending on the bill value. Create a variable called 'tip' for this. Try **not** to use an if/else statement.

2. Print a string to the console containing the bill value, the tip, and the final value (bill + tip). Example: 'The bill was 275, the tip was 41.25, and the total value 316.25'

* TEST DATA: Test for bill values 275, 28 and 430

B.

Create a function called celsiusToFahrenheit:

1. Store a celsius temperature into a variable. Convert it to fahrenheit and output "NN°C is NN°F". Create a function called fahrenheitToCelsius;

2. Store a fahrenheit temperature into a variable. Convert it to celsius and output "NN°F is NN°C."

C.

Back to the two teams game! There is a new discipline, which 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 '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.

5. Ignore draws this time.

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

D

Lucas is still building his tip calculator, using the same rules as before: Tip 15% of the bill if the bill value is between 50 and 300, and if the value is different, the tip is 20%.

1. Write a function 'calcTip' that takes any bill value as an input and returns the corresponding tip, calculated based on the rules above (you can check out the code from first tip calculator challenge if you need to). Use the function type you like the most. Test the function using a bill value of 100.

2. And now let's use arrays! So create an array 'bills' containing the test data below.

3. Create an array 'tips' containing the tip value for each bill, calculated from the function you created before.

4. BONUS: Create an array 'total' containing the total values, so the bill + tip.

TEST DATA: 125, 555 and 44