

Solve these problems in a Javascript file on VSCode.

Additional Instruction:

We need to develop the habit of putting all our global **variables** and **arrays** in objects instead of just stand alone, don't worry about doing the same for functions just yet.

So for these solutions there should never be any variables or arrays just on their own - everything should be in an object.

"1. arrange these array items in alphabetical order and log myArray to the console"

```
let myArray = ["Elishka", "Stu", "Dean", "Andy", "Mati"]
```

"2. Declare a variable as a string, and then split that string into an array of letters (check out string methods). Store the result in a new variable and log it to the console"

"3. Take the word 'codenation' and rearrange the letters in the word so they are in alphabetical order. Store the result in a new variable and log it to the console"

"4. Change 'Dean' into 'Deanolad'"

start by storing the string 'Benjamin' in a variable **(Remember to look up array methods)**

"5. write a function that adds a fruit onto the end of an array"

Use this array inside your function (just copy and paste it into your function body) `let array1 = ["apple", "pear", "banana"]`

"6. The longest of two words"

"Your first task is to find the method which will split a string into an array of strings (check out string methods)"

given a string with two words write a function which returns the longest word out of the two; For example "Hello Dan" would return the string "Hello"

"Hello Benjamin" would return the string "Benjamin"
The longest word is returned each time.

"7: The Age Calculator"

create a function that takes a birth year AND a future year as arguments. Calculate your 2 possible ages for that year based on the stored values.

For example, if you were born in 1988, then in 2026 you'll be either 37 or 38. Output them to the console like so: "I will be either A or B in YYYY".

Test your function with a value of 1985 for the birth year and 2050 for the future year.

" 8. Calculate properties of a circle"

Write a function that takes the radius as an argument.
Calculate the circumference based on the radius, and log "The circumference is X" to the console. Calculate the area based on the radius, and log "The area is Y" to the console.

extension: round these values to the nearest whole number.

test your function with the value of 9 for radius. It should return a value of 56... for circumference and 254... for the area.

"9. The temperature convertor"

Write a function which takes a celcius temperature as an argument.
Convert it to fahrenheit and output "X°C is Y°F" to the console.

Test your function with 32 as the celcius value. It should return a value of 89.6.

"10. Sum all the numbers in a range"

Given an array of two numbers you need to write a function which will add together those two numbers AND all the numbers inbetween them.

For example -

if you put [5, 10] into your function it would calculate `//5 + 6 + 7 + 8 + 9 + 10`

then log the result to the console. test your code with

[1, 4] which should equal 10 [1, 5] which should equal 15

"11. The difference between two arrays"

Write a function that, when given two arrays, will compare them both, and return an array with only the items found in one.

In other words, your function should return an array with items NOT found in both arrays.

for example take these two arrays: ['dan', 'ben']

['dan', 'andy', 'ben', 'stuart']

should return an array: ['andy', 'stuart']

`//because they were not found in both arrays.`