Lab: Functions

Problems for exercise and homework for the "JS Fundamentals" Course @ SoftUni.
Submit your solutions in the SoftUni judge system at: https://judge.softuni.bg/Contests/1262

1. Repeat String

Write a function that receives a **string** and a **repeat count n**. The function should return a new string (the old one repeated **n** times).

Examples

Input	Output
abc 3	abcabcabc
String 2	StringString

Hints

1. Firstly create a function and initialize the two parameters.

```
function solve(str, n) {

    let result = '';

    for (let i = 0; i < n; i++) {
        result+= str;
    }
    return result
}
```

2. In the main function, print the result.

2. Grades

Write a function that **receives a grade** between **2.00** and **6.00** and **prints** a formatted line with **grade and description**

- < 3.00 - "**Fail**"
- >= 3.00 and < 3.50 - "**Poor**"
- >= 3.50 and < 4.50 - "**Good**"
- >= 4.50 and < 5.50 - "**Very good**"
- >= 5.50 - "**Excellent**"

Examples

Input	Output
3.33	Poor (3.33)
4.50	Very good (4.50)

2.99	Fail (2)

Hints

```
function formatGrade(grade) {
    if (grade < 3.00) {
        console.log('Fail (2)')
    } else if (grade < 3.5) {
        console.log(`Poor (${grade})`)
    }

    // TODO: Add other conditions
}
```

3. Math Power

Write a function that **calculates** and **returns** the value of a number **raised** to a **given power**:

Examples

Input	Output
2 8	256
3 4	81

Hints

- Create a function which will have **two parameters** - the **number** and the **power**, and will **return** a **result**.
- **Print** the result.

4. Orders

Write a function that calculates the **total price** of an order and prints it on the console. The function should receive one of the following products: **coffee, coke, water, snacks**; and a **quantity** of the product. The **prices** for a single piece of each product are:

- coffee - 1.50
- water - 1.00
- coke - 1.40
- snacks - 2.00

Print the result **formatted** to the **second decimal place**.

Example

Input	Output
water 5	5.00

coffee 2	3.00

Hints

- Create a function and pass the two variables in.
- Print the result in the method.

5. Simple Calculator

Write a function that receives **three parameters** and write an **arrow function** that calculate result depending of operator. Operator can be `'multiply'`, `'divide'`, `'add'`, `'subtract'`.

Input

The input comes as parameters named **`numOne, numTwo, operator`**.

Examples

Input	Output
5 5 'multiply'	25
40 8 'divide'	5
12 19 'add'	31
50 13 'subtract'	37

Hints

- Use **`switch`** statements for the different operators.

```
function solve(a, b, operator) {
    switch (operator) {
        case "multiply":
            let multiply = (a, b) => a * b;
            console.log(multiply(a, b));
            break;
        case "divide":
            //TODO: divide the numbers
            break;
        case "add":
            //TODO: add the numbers
            break;
        case "subtract":
            //TODO: subtract the numbers
            break;
    }
}
```

6. Sign Check

You are given a function, that calculate the result of **`numOne * numTwo * numThree`** (the product) is **negative** or **positive**.

Try to do this **WITHOUT** multiplying the 3 numbers.

The input comes as parameters named **`numOne, numTwo, numThree`**.

Example

Input	Output
5 12 -15	Negative
-6 -12 14	Positive
-1 -2 -3	Negative
-5 1 1	Negative

Hints

- Check all the different variantions for the three numbers.

```
function solve(numOne, numTwo, numThree) {
    let result = '';
    if (numOne >= 0 && numTwo >= 0 && numThree >= 0) {
        result = 'Positive';
    }
    //TODO: write the other conditions

    console.log(result);
}
```