

Lab: Functions

Problems for exercise and homework for the ["JS Fundamentals" Course @ SoftUni.](https://softuni.org/)

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	abccabccabcc
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)
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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	3.00
2	

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 variations 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);  
}
```