

# Lab: Advanced Functions

Problems for in-class lab for the ["JavaScript Advanced" course @ SoftUni](https://judge.softuni.org/Contests/1528/Lab-Advanced-Functions). Submit your solutions in the SoftUni judge system at <https://judge.softuni.org/Contests/1528/Lab-Advanced-Functions>.

## 1. Add

Write a program that keeps a number **inside its context** and **returns** new function that **adds** a **given** number to the previous one.

### Input

Check the **examples below** to see how your code will be executed

### Output

Your function should **return** the final result .

### Examples

Sample Input	Output
<pre>let add5 = solution(5); console.log(add5(2)); console.log(add5(3));</pre>	<pre>7 8</pre>
<pre>let add7 = solution(7); console.log(add7(2)); console.log(add7(3));</pre>	<pre>9 10</pre>

## 2. Currency Format

Write a **higher-order** function that fixes some of the parameters of another function. Your program will receive a function that **takes 4 parameters** and **returns a formatted string** (a monetary value with currency symbol).

Your task is to **return another function** that only **takes one parameter** and **returns the same formatted string**.

You will receive the following function:

currencyFormatter
<pre>function currencyFormatter(separator, symbol, symbolFirst, value) {   let result = Math.trunc(value) + separator;   result += value.toFixed(2).substr(-2,2);   if (symbolFirst) return symbol + ' ' + result;   else return result + ' ' + symbol; }</pre>

Set the following parameters to fixed values:

separator: ","

symbol: "\$"

symbolFirst: true

The final parameter **value** is the one that the returned function will receive.

## Input

You will receive a **function** parameter

## Output

You need to **return a function** that takes one parameter - **value**

## Examples

Sample Input
<pre>let dollarFormatter = result(currencyFormatter); console.log(dollarFormatter(5345)); // \$ 5345,00 console.log(dollarFormatter(3.1429)); // \$ 3,14 console.log(dollarFormatter(2.709)); // \$ 2,71</pre>

## 3. Filter Employees

Write a program that filters the employees of your company. You should print the result in a specific format. You will receive 2 parameters (**data**, **criteria**). You should **parse** the input, find all employees that fulfill the criteria and print them.

## Input

You will receive a **string** with all the employees, and a **criteria** by which you should sort the employees. If the criteria is "**all**" print all the employees in the given format.

## Output

The output should be the **printed** on the console.

For more information check the examples.

## Examples

Sample Input	Output
<pre>`[{   "id": "1",   "first_name": "Ardine",   "last_name": "Bassam",   "email": "abassam0@cnn.com",   "gender": "Female" }, {   "id": "2",   "first_name": "Kizzee",   "last_name": "Jost",   "email": "kjost1@forbes.com",   "gender": "Female" }]`</pre>	<pre>0. Ardine Bassam - abassam0@cnn.com 1. Kizzee Jost - kjost1@forbes.com</pre>

<pre>     },     {       "id": "3",       "first_name": "Evanne",       "last_name": "Maldin",       "email": "emaldin2@hostgator.com",       "gender": "Male"     }   ],   'gender-Female' </pre>	
<pre>   [{     "id": "1",     "first_name": "Kaylee",     "last_name": "Johnson",     "email": "k0@cnn.com",     "gender": "Female"   }, {     "id": "2",     "first_name": "Kizzee",     "last_name": "Johnson",     "email": "kjost1@forbes.com",     "gender": "Female"   }, {     "id": "3",     "first_name": "Evanne",     "last_name": "Maldin",     "email": "emaldin2@hostgator.com",     "gender": "Male"   }, {     "id": "4",     "first_name": "Evanne",     "last_name": "Johnson",     "email": "ev2@hostgator.com",     "gender": "Male"   } ], 'last_name-Johnson' </pre>	<p>0. Kaylee Johnson - k0@cnn.com</p> <p>1. Kizzee Johnson - kjost1@forbes.com</p> <p>2. Evanne Johnson - ev2@hostgator.com</p>

## 4. Command Processor

Write a program that keeps a string **inside its context** and can execute different **commands** that modify or print the string on the console.

**append(string)** - append the given **string** at the end of the internal string

**removeStart(n)** - **remove** the **first n** characters from the string, **n** is an integer

**removeEnd(n)** - **remove** the **last n** characters from the string, **n** is an integer

**print** - **print** the stored string on the **console**

### Input

Check the examples below to see how your code will be executed

### Output

Whenever you receive the command **print**, the output should be the **printed** on the console.

### Examples

Sample Input	Output
<pre>let firstZeroTest = solution();  firstZeroTest.append('hello'); firstZeroTest.append('again'); firstZeroTest.removeStart(3); firstZeroTest.removeEnd(4);</pre>	1oa
<pre>let secondZeroTest = solution();  secondZeroTest.append('123'); secondZeroTest.append('45'); secondZeroTest.removeStart(2); secondZeroTest.removeEnd(1); secondZeroTest.print();</pre>	34