# Lab: Advanced Functions

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

## 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 |
| let add5 = solution(5);  console.log(add5(2));  console.log(add5(3)); | 7  8 |
| let add7 = solution(7);  console.log(add7(2));  console.log(add7(3)); | 9  10 |

## 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 |
| 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;  } |

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 |
| let dollarFormatter = result(currencyFormatter);  console.log(dollarFormatter(5345)); *// $ 5345,00*  console.log(dollarFormatter(3.1429)); *// $ 3,14*  console.log(dollarFormatter(2.709)); *// $ 2,71* |

## 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 fullfil the citeria and print them.

### Input

You will receive a **string** with all the employees, and a **criteria** by witch 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 |
| `[{  "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"  },  {  "id": "3",  "first\_name": "Evanne",  "last\_name": "Maldin",  "email": "emaldin2@hostgator.com",  "gender": "Male"  }]`,  'gender-Female' | 0. Ardine Bassam - abassam0@cnn.com  1. Kizzee Jost - kjost1@forbes.com |
| `[{  "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' | 0. Kaylee Johnson - k0@cnn.com  1. Kizzee Johnson - kjost1@forbes.com  2. Evanne Johnson - ev2@hostgator.com |

## 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 |
| let firstZeroTest = solution();  firstZeroTest.append('hello');  firstZeroTest.append('again');  firstZeroTest.removeStart(3);  firstZeroTest.removeEnd(4); | loa |
| let secondZeroTest = solution();  secondZeroTest.append('123');  secondZeroTest.append('45');  secondZeroTest.removeStart(2);  secondZeroTest.removeEnd(1);  secondZeroTest.print(); | 34 |