# Lab: Advanced Functions

Problems for in-class lab for the [“JavaScript Advanced” course @ SoftUni](https://softuni.bg/courses/javascript-advanced). Submit your solutions in the SoftUni judge system at <https://judge.softuni.bg/Contests/330/>.

## Aggregates

Write a JS program that uses a **reducer** function to **display** information about an **input array**.

### Input

You will receive an **array** of **numeric** values.

### Output

The output should be the **printed** on the console. Display the **sum** of all elements in the array, the value of the **smallest**, the value of the **biggest**, the **product** of all elements and a string of all elements **joined** together.

### Examples

|  |  |
| --- | --- |
| Sample Input | Output |
| [2,3,10,5] | Sum = 20  Min = 2  Max = 10  Product = 300  Join = 23105 |
| [5, -3, 20, 7, 0.5] | Sum = 29.5  Min = -3  Max = 20  Sum = -1050  Join = 5-32070.5 |

## Currency Format

Write a higher-order JS 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.

This is the function you will receive:

|  |
| --- |
| 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* |

## Max Element

Write a JS program that takes an **array** of **numeric elements** as input and **returns** the **largest** element of the array.

### Input

You will receive an **array** of **numbers**.

### Output

The **output** should be the **return** value of your function. It represents the **largest element** of the array.

### Examples

|  |  |
| --- | --- |
| Sample Input | Output |
| [10, 20, 5] | 20 |
| [1, 44, 123, 33] | 123 |