Bootstrap and Front-End Basics

1. Sort Array

Write a function that **sorts an array** with **numeric** values in **ascending** or **descending** order, depending on an **argument** that is passed to it.
You will receive a **numeric array** and a **string** as arguments to the first function in your code.
- If the second argument is **asc**, the array should be sorted in **ascending order** (smallest values first).
- If it is **desc**, the array should be sorted in **descending order** (largest first).

Input
You will receive a numeric array and a string as input parameters.

Output
The output should be the sorted array.

Examples

Input	Output
[14, 7, 17, 6, 8], 'asc'	[6, 7, 8, 14, 17]
[14, 7, 17, 6, 8], 'desc'	[17, 14, 8, 7, 6]

2. Argument Info

Write a function that displays **information** about the **arguments** which are passed to it (**type** and **value**) and a **summary** about the number of each type in the following format:

"{argument type}: {argument value}"

Print **each** argument description on a **new line**. At the end print a **tally** with counts for each type in **descending** order, each on a **new line** in the following format:

"{type} = {count}"

If two types have the **same count**, use **order of appearance**. Do **NOT** print anything for types that do not appear in the list of arguments.

Input
You will receive a series of arguments **passed** to your function.

Output
<u>**Print on the console**</u> the **type** and **value** of each argument passed into your function.

Example

Input
cat', 42, function( ) { console.log('Hello world!'); }

Output
string: cat number: 42 function: function( ) { console.log('Hello world!'); } string = 1 number = 1 function = 1

3. Personal BMI

A wellness clinic has contacted you with an offer - they want you to write a program that composes **patient charts** and performs some preliminary evaluation of their condition. The data comes in the form of **several arguments**, describing a person - their **name**, **age**, **weight** in kilograms and **height** in centimetres. Your program must compose this information into an **object** and **return** it for further processing.

The patient chart object must contain the following properties:
- **name**
- **personalInfo**, which is an object holding their **age**, **weight** and **height** as properties
- **BMI** - body mass index. You can find information about how to calculate it here: https://en.wikipedia.org/wiki/Body_mass_index
- **status**

The status is one of the following:
- **underweight**, for BMI less than 18.5;
- **normal**, for BMI less than 25;
- **overweight**, for BMI less than 30;
- **obese**, for BMI 30 or more.

Once the BMI and status are calculated, you can make a recommendation. If the patient is obese, add an additional property called recommendation and set it to **"admission required"**.

Input
You function needs to take four arguments - **name**, **age**, **weight** and **height**.

Output
Your function needs to **return** an **object with properties** as described earlier. All numeric values should be **rounded** to the nearest whole number. All fields should be named **exactly as described** (their order is not important). Look at the sample output for more information.

Input	Output

"Peter", 29, 75, 182	{
	   name: 'Peter',
	   personalInfo: {
	      age: 29,
	      weight: 75,
	      height: 182
	   },
	   BMI: 23,
	   status: 'normal'
	}

"Honey Boo Boo", 9, 57, 137	{
	   name: 'Honey Boo Boo',
	   personalInfo: {
	      age: 9,
	      weight: 57,
	      height: 137
	   },
	   BMI: 30,
	   status: 'obese',
	   recommendation: 'admission required'
	}

4. Heroic Inventory

In the era of heroes, every hero has his own items which make him unique. Create a function which creates a **register for the heroes**, with their **names**, **level**, and **items**, if they have such. The register should accept data in a specified format, and return it presented in a specified format.

Input
The **input** comes as array of strings. Each element holds data for a hero, in the following format:

"{heroName} / {heroLevel} / {item1}, {item2}, {item3} . . ."

You must store the data about every hero. The **name** is a **string**, the **level** is a **number** and the items are all **strings**.

Output
The **output** is a **JSON representation** of the data for all the heroes you've stored. The data must be an **array of all the heroes**. Check the examples for more info.

Input	Output
['Isacc / 25 / Apple, GravityGun', 'Derek / 12 / BarrelVest, DestructionSword', 'Hes / 1 / Desolator, Sentinel, Antara']	[{"name":"Isacc","level":25,"items": ["Apple","GravityGun"]}, {"name":"Derek","level":12,"items": ["BarrelVest","DestructionSword"]}, {"name":"Hes","level":1,"items": ["Desolator","Sentinel","Antara"]}]
['Jake / 1000 / Gauss, HolidayGrenade']	[{"name":"Jake","level":1000,"items": ["Gauss","HolidayGrenade"]}]

5. JSON's Table

JSON's Table is a magical table which turns JSON data into an HTML table. You will be given **JSON strings** holding data about employees, including their **name**, **position** and **salary**. You need to **parse that data** into **objects**, and create an **HTML table** which holds the data for each **employee on a different row**, as **columns**.

The **name** and **position** of the employee are **strings**, the **salary** is a **number**.

Input
the **input** comes as array of strings. Each element is a JSON string which represents the data for a certain employee.

Output
The **output** is the HTML code of a table which holds the data exactly as explained above. Check the examples for more info.

Example

Input	Output
['{"name":"Pesho","position":"Promenliva","salary":100000}', '{"name":"Teo","position":"Lecturer","salary":1000}', '{"name":"Georgi","position":"Lecturer","salary":1000}']	``` <table> <tr> <td>Pesho</td> <td>Promenliva</td> <td>100000</td> </tr> <tr> <td>Teo</td> <td>Lecturer</td> <td>1000</td> </tr> <tr> <td>Georgi</td> <td>Lecturer</td> <td>1000</td> </tr> </table> ```

Hints

- You might want to **escape the HTML**. Otherwise you might find yourself victim to vicious JavaScript **code in the input**.

6. Cappy Juice

You will be given different juices, as **strings**. You will also **receive quantity** as a **number**. If you receive a juice, you already have, **you must sum** the **current quantity** of that juice, with the **given one**. When a juice reaches **1000 quantity**, it produces a bottle. You must **store all produced bottles** and you must **print them** at the end.

Note: 1000 quantity of juice is **one bottle**. If you happen to have **more than 1000**, you must make **as much bottles as you can**, and store **what is left** from the juice.

Example: You have 2643 quantity of Orange Juice – this is **2 bottles** of Orange Juice and **643 quantity left**.

Input
The **input** comes as array of strings. Each element holds data about a juice and quantity in the following format:

"{juiceName} => {juiceQuantity}"

Output
The **output** is the produced bottles. The bottles are to be printed in **order of obtaining the bottles**. Check the second example bellow - even though we receive the Kiwi juice first, we don't form a bottle of Kiwi juice until the 4th line, at which point we have already create Pear and Watermelon juice bottles, thus the Kiwi bottles appear last in the output.

Examples

Input	Output
['Orange => 2000', 'Peach => 1432', 'Banana => 450', 'Peach => 600', 'Strawberry => 549']	Orange => 2 Peach => 2
['Kiwi => 234', 'Pear => 2345', 'Watermelon => 3456', 'Kiwi => 4567', 'Pear => 5678', 'Watermelon => 6789']	Pear => 8 Watermelon => 10 Kiwi => 4