

Problem 2. Vegetable store

```
class VegetableStore{  
    //TODO Implement this class  
}
```

Write a **class Vegetable store**, which supports the described functionality below.

Functionality

Constructor

Should have these **3** properties:

- **owner** - **string**
- **location** - **string**
- **availableProducts** - **empty array**

At the initialization of the **VegetableStore** class, the **constructor** accepts the **owner** and **location**.

Hint: You can add more properties to help you finish the task.

loadingVegetables (vegetables)

This method makes loading of the products in the store. The method takes 1 argument: **vegetables** (array of strings).

- **Every element** into this array is information about vegetable in the format:
"{type} {quantity} {price}"
 - They are separated by a single space. The **quantity** and **price** are per unit kilogram.
Example: ["Okra 2.5 3.5", "Beans 10 2.8", "Celery 5.5 2.2"...]
- If the **type** of the current vegetable is already present in **availableProducts** array, add the new quantity to the old one and update the old price per kilogram **only if** the current one is **higher**.
- Otherwise, should **add** the vegetable, with properties: **{type, quantity, price}** to the **availableProducts** array.
- In all cases, you must **finally return a string** in the following format:

`Successfully added {type1}, {type2}, ...{typeN}`

Note: When returning the **string**, keep in mind that the different **types** of **vegetables** must be:

- **Unique** - for instance:
 - **"Successfully added Okra, Beans, Celery"** - is a correctly returned string
 - **"Successfully added Okra, Beans, Okra"** - is not a correctly returned string
- **Separated by comma and space (,)**

buyingVegetables (selectedProducts)

With this method, customers can buy products from the store. The method takes 1 argument: **selectedProducts (array of strings)**.

- **Every element** in this array is information about the selected vegetables in the format:

"{type} {quantity}"

- For each element of the array **selectedProducts**, check:
 - If the **type** of the current vegetable is not present in **availableProducts** array, an error with the following message should be **thrown**:

`{type} is not available in the store, your current bill is \${totalPrice}.`

- **totalPrice** - is the total price of all customer's **purchases**, if there are **no** purchases yet the **value** should be **0.00**.

- If the **quantity** selected by the customer for a given vegetable is **greater** than the quantity recorded in the array **availableProducts**, an error with the following message should be **thrown**:

`The quantity {quantity} for the vegetable {type} is not available in the store, your current bill is \${totalPrice}.`

- **totalPrice** - is the total price of all customer's **purchases**, if there are **no** purchases yet the **value** should be **0.00**.

- Otherwise, if the above conditions are not met, you have to **calculate** the **price** for the given vegetable by **multiplying** the price per kilogram for the **given type** by the **quantity** desired by the customer. Then reduce the quantity recorded in the **availableProducts** array.

- **Note:** Add a **variable** that will calculate the **total price** obtained from the individual prices of **each** vegetable in the array.

- Finally, you need to **return** the string in the following format:

`Great choice! You must pay the following amount \${totalPrice}.`

Note: The **totalPrice** must be rounded to the second decimal point and **before** the **price** must have a **dollar sign (\$)**.

rottingVegetable (type, quantity)

With this method, the freshness of the vegetables in the store is preserved, removing the rotting vegetables. The method takes 2 arguments:

- **type** (string)
 - **quantity** (number)
- If the submitted **type** is not present in the **availableProducts** array, an error with the following message should be **thrown**:

```
`{type} is not available in the store.`
```
- If the submitted **quantity is greater** than the quantity recorded in the **availableProducts** array, then the **value** of the quantity in the array becomes **zero**, and **return** the **following string**:

```
`The entire quantity of the {type} has been removed.`
```
- Otherwise, reduce the **quantity** recorded in the array **availableProducts** with the quantity obtained as a parameter, and **return** the string in the following format:

```
`Some quantity of the {type} has been removed.`
```

revision ()

- This method **returns all** available **products** in the store in the following format:
 - The first line shows the following message:

```
"Available vegetables:"
```
 - On the new line, display information about each vegetable sorted in **ascending** order of **price**:

```
`{type}-{quantity}-${price}`
```
 - The last line shows the following message:

```
`The owner of the store is {owner}, and the location is {location}.`
```

Example

Input 1
<pre>let vegStore = new VegetableStore("Jerrie Munro", "1463 Pette Kyosheta, Sofia"); console.log(vegStore.loadingVegetables(["Okra 2.5 3.5", "Beans 10 2.8", "Celery 5.5 2.2", "Celery 0.5 2.5"]));</pre>

Output 1
Successfully added Okra, Beans, Celery

Input 2
<pre>let vegStore = new VegetableStore("Jerrie Munro", "1463 Pette Kyosheta, Sofia"); console.log(vegStore.loadingVegetables(["Okra 2.5 3.5", "Beans 10 2.8", "Celery 5.5 2.2", "Celery 0.5 2.5"])); console.log(vegStore.buyingVegetables(["Okra 1"])); console.log(vegStore.buyingVegetables(["Beans 8", "Okra 1.5"])); console.log(vegStore.buyingVegetables(["Banana 1", "Beans 2"]));</pre>

Output 2
<p>Successfully added Okra, Beans, Celery</p> <p>Great choice! You must pay the following amount \$3.50.</p> <p>Great choice! You must pay the following amount \$27.65.</p> <p>Uncaught Error: Banana is not available in the store, your current bill is \$0.00.</p>

Input 3
<pre>let vegStore = new VegetableStore("Jerrie Munro", "1463 Pette Kyosheta, Sofia"); console.log(vegStore.loadingVegetables(["Okra 2.5 3.5", "Beans 10 2.8", "Celery 5.5 2.2", "Celery 0.5 2.5"])); console.log(vegStore.rottingVegetable("Okra", 1)); console.log(vegStore.rottingVegetable("Okra", 2.5)); console.log(vegStore.buyingVegetables(["Beans 8", "Okra 1.5"]));</pre>

Output 3
<p>Successfully added Okra, Beans, Celery</p> <p>Some quantity of the Okra has been removed.</p> <p>The entire quantity of the Okra has been removed.</p> <p>Uncaught Error: The quantity 1.5 for the vegetable Okra is not available in the store, your current bill is \$22.40.</p>

Input 4

```
let vegStore = new VegetableStore("Jerrie Munro", "1463 Pette Kyosheta, Sofia");
console.log(vegStore.loadingVegetables(["Okra 2.5 3.5", "Beans 10 2.8", "Celery 5.5 2.2", "Celery 0.5 2.5"]));
console.log(vegStore.rottingVegetable("Okra", 1));
console.log(vegStore.rottingVegetable("Okra", 2.5));
console.log(vegStore.buyingVegetables(["Beans 8", "Celery 1.5"]));
console.log(vegStore.revision());
```

Output 4

Successfully added Okra, Beans, Celery
Some quantity of the Okra has been removed.
The entire quantity of the Okra has been removed.
Great choice! You must pay the following amount \$26.15.
Available vegetables:
Celery-4.5-\$2.5
Beans-2-\$2.8
Okra-0-\$3.5
The owner of the store is Jerrie Munro, and the location is 1463 Pette Kyosheta, Sofia.