

Problem 2. Art Gallery

```
class ArtGallery {  
    //TODO: implement this class  
}
```

Write a **class Art Gallery**, which supports the described functionality below.

Functionality

Constructor

Should have these **4** properties:

- **creator** - string
- **possibleArticles** - { "picture":200,"photo":50,"item":250 }
- **listOfArticles** - empty array
- **guests** - empty array

At the initialization of the **ArtGallery** class, the **constructor** accepts only the **creator**!

The **possibleArticles** is an **object**, and the **submitted values** are **by default** and represent the **available article models** ("picture", "photo", "item"), which will be displayed in the gallery and the necessary points for purchasing a specific article.

Methods

addArticle(articleModel, articleName, quantity)

This method adds article to the art gallery. Method accepts 3 arguments:

- **articleModel** (string);
- **articleName** (string);
- **quantity** (number);
- If the **articleModel**, is not present in **possibleArticles** object with specified default models, an error with the following message should be thrown:

"This article model is not included in this gallery!"

Note that the resulting **articleModel** argument can be submitted in both **lowercase and uppercase letters** and will **be correct**, and no error should be thrown see the **example below**:

articleModel - ("picture") ->correct

articleModel - ("Picture") ->correct

articleModel - ("PICTURE") ->correct

- If the **articleName** already exists in **listOfArticles** array and the **articleModel** is the same just add the new quantity to the old one.
- Otherwise, should **add** the **articleModel**, **articleName**, **quantity** to **listOfArticles** array in following format: **{articleModel, articleName, quantity}**. The **articleModel** must be **toLowerCase()**.
- **And finally**, return the following message:

"Successfully added article {articleName} with a new quantity- {quantity}."

inviteGuest (guestName, personality)

Accept 2 arguments: **guestName (string)**, **personality (string)**

- If the **guestName** is already present in the **guests** array, throw a new error:
"{guestName} has already been invited."
- Otherwise, **create a new record** in the **guests** array in following format: **{guestName, points, purchaseArticle: default 0}**. Where the **points** are the **points that the guest has**. With them he can buy an article. They are **determined depending on personality** (see the table below).

Example- ("Ivan", "Vip") -> the points are 500 [If you get a **personality** that is not present in the table below, put 50 points ("Petar", "Normal")->50 points)];

The property **purchaseArticle** will record the number of **customer purchases**, initially at the invitation of the guest **the value is zero**.

- Finally, return the message:
"You have successfully invited {guestName}!"

Personality	Point
"Vip"	500
"Middle"	250

buyArticle (articleModel, articleName, guestName)

Accept 3 arguments: **articleModel (string)**, **articleName (string)** and **guestName (string)**

- If the **articleName** is not found in **listOfArticles** array or the **articleModel** doesn't match, throw a new error:

"This article is not found."

- If the **quantity** of the current **article** is **equal to 0**, return message:

"The {articleName} is not available."

- If the **guestName** is not present in the **guests array**, return message:

"This guest is not invited."

- Otherwise, you need to check if the **guest has the required number of points** to purchase the article. (The necessary points of the article are determined by the model in **possibleArticles array**)

- If the **points** are **not enough to buy an article**, return the following message:

"You need to more points to purchase the article."

- If **they are enough**, you need to **reduce the current points of the guest** by according to the points of model article in **possibleArticles array**, **reduce the quantity** of the current article and **increase the number of purchases** of the guest.

- Finally, return message:

"{guestName} successfully purchased the article worth {articlePoint} points."

The **articlePoint** is the value at which the article was purchased.

showGalleryInfo (criteria)

Accept 1 argument-**criteria**. This method **return gallery information** based on the criteria.

Possible values for the **criterion** are two types:

- If the criterion is-**"article"**- then you need to **return** all the information about the articles saved in **listOfArticle** array in following format:

- On first line show the following message:

"Articles information:"

- On the lines, display information about each article:

{articleModel} - {articleName} - {quantity}

- If the criterion is-**"guest"**- then you need to **return** all the information about the guests saved in **guest** array in following format:

- On first line show the following message:

"Guests information:"

- On the lines, display information about each guest:

`{guestName}` - `{purchaseArticle}`

Examples

Input 1
<pre>const artGallery = new ArtGallery('Curtis Mayfield'); console.log(artGallery.addArticle('picture', 'Mona Liza', 3)); console.log(artGallery.addArticle('Item', 'Ancient vase', 2)); console.log(artGallery.addArticle('PICTURE', 'Mona Liza', 1));</pre>

Output 1
<pre>Successfully added article Mona Liza with a new quantity- 3. Successfully added article Ancient vase with a new quantity- 2. Successfully added article Mona Liza with a new quantity- 1.</pre>

Input 2
<pre>const artGallery = new ArtGallery('Curtis Mayfield'); console.log(artGallery.inviteGuest('John', 'Vip')); console.log(artGallery.inviteGuest('Peter', 'Middle')); console.log(artGallery.inviteGuest('John', 'Middle'));</pre>

Output 2
<pre>You have successfully invited John! You have successfully invited Peter!</pre>

John has already been invited.

Input 3

```
const artGallery = new ArtGallery('Curtis Mayfield');
artGallery.addArticle('picture', 'Mona Liza', 3);
artGallery.addArticle('Item', 'Ancient vase', 2);
artGallery.addArticle('picture', 'Mona Liza', 1);
artGallery.inviteGuest('John', 'Vip');
artGallery.inviteGuest('Peter', 'Middle');
console.log(artGallery.buyArticle('picture', 'Mona Liza', 'John'));
console.log(artGallery.buyArticle('item', 'Ancient vase', 'Peter'));
console.log(artGallery.buyArticle('item', 'Mona Liza', 'John'));
```

Output 3

John successfully purchased the article worth 200 points.

Peter successfully purchased the article worth 250 points.

This article is not found.

Input 4

```
const artGallery = new ArtGallery('Curtis Mayfield');  
  
artGallery.addArticle('picture', 'Mona Liza', 3);  
  
artGallery.addArticle('Item', 'Ancient vase', 2);  
  
artGallery.addArticle('picture', 'Mona Liza', 1);  
  
artGallery.inviteGuest('John', 'Vip');  
  
artGallery.inviteGuest('Peter', 'Middle');  
  
artGallery.buyArticle('picture', 'Mona Liza', 'John');  
  
artGallery.buyArticle('item', 'Ancient vase', 'Peter');  
  
console.log(artGallery.showGalleryInfo('article'));  
  
console.log(artGallery.showGalleryInfo('guest'));
```

Output 4

```
Articles information:  
  
picture - Mona Liza - 3  
  
item - Ancient vase - 1  
  
Guests information:  
  
John - 1  
  
Peter - 1
```