

EXERCICE 1 – FRUITS DATABASE

OBJECTIVES

- ✓ Manipulate ARRAY and OBJECTS
- ✓ Use built in MODULES FS
- ✓ Create a module with some functions


EXERCICE 1 – FRUITS DATABASE

PART A

Let's manage a **list of fruits !!**

Complete the file : fruitsLib.js

Each fruit has 3 properties:



- Name (string)
- Color (string)
- Price (integer)

Q1 - Code the function addFruit **to add a fruit to the list of fruits**

Q2 - Code the function getColorOf to **get the color of a fruit**, given as parameter the fruit name

Q3 - Code the function getPriceOf to **get the price of a fruit**, given as parameter the fruit name

Q4 - Code the function listFruit to **display all the fruits name**

Example: if you have 2 fruits (banana and apple) in the list, this function display:

Here are the fruits
- Banana
- Apple

The code to TEST your function is ALREADY done :

```
addFruit("banana", "yellow", 12);  
addFruit("apple", "red", 20);  
addFruit("mango", "green", 20);  
  
listFruits();  
  
console.log("banana price is :" + getPriceOf("banana"));  
console.log("mango color is :" + getColorOf("mango"));
```

Q5 – Run the file *fruitsLib.js*

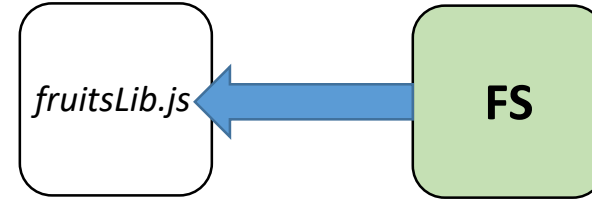
=> You should see the following content on the console:

```
fruit added:  banana  
fruit added:  apple  
fruit added:  mango  
Here are the fruits:  
-banana  
-apple  
-mango  
  
banana price is :12  
mango color is :green
```

PART B

Now let's **SAVE** and **LOAD** the fruit list in a JSON file !

Import the built-in module FS to read and write files



Q1 - Code the function save() to save the fruits in a JSON file named : fruits.JSON

Q2 - Code the function load() to load the fruits from a JSON file named : fruits.JSON

Q3 – Add the save() at the end of the the test code from PART A

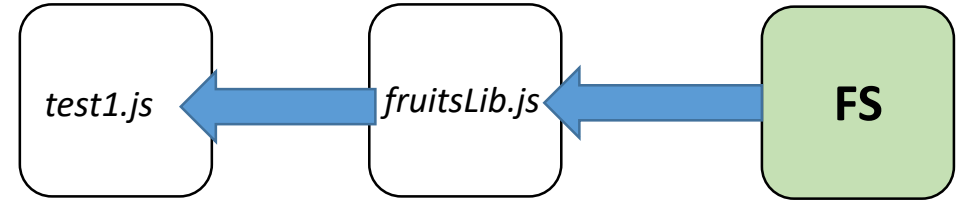
Q4 – Run the file *fruitsLib.js*

=> You should see a file: fruits.json with following content :

```
[
  {"name": "banana", "color": "yellow", "price": 12},
  {"name": "apple", "color": "red", "price": 20},
  {"name": "mango", "color": "green", "price": 20}
]
```

PART C

Now let's put the test code **in another file** : *test1.js*



Create a new file: *test1.js*

On test1.js :

- Move the code to test function to this file
- Require the *fruitLib.js* to access to the functions from *test1.js*

Run the file *test1.js*

=> You should see the SAME as PART A and B

On fruitLib.js :

- Export the following functions to the module:
 - *addFruit*
 - *getPriceOf*
 - *getColorOf*
 - *listFruits*
 - *save*