

Exercise – array iteration

1. Array iteration, 2p

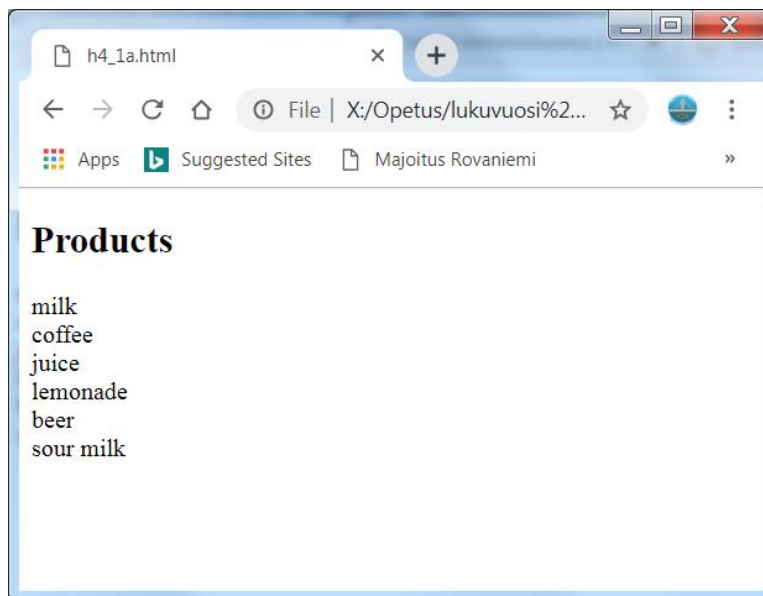
In your code, create the following array

```
var products = ["milk", "coffee", "juice", "lemonade", "beer", "sour milk"];
```

You can make a separate .html file for each exercise. It is also fine to do all the exercises to the same file if you prefer.

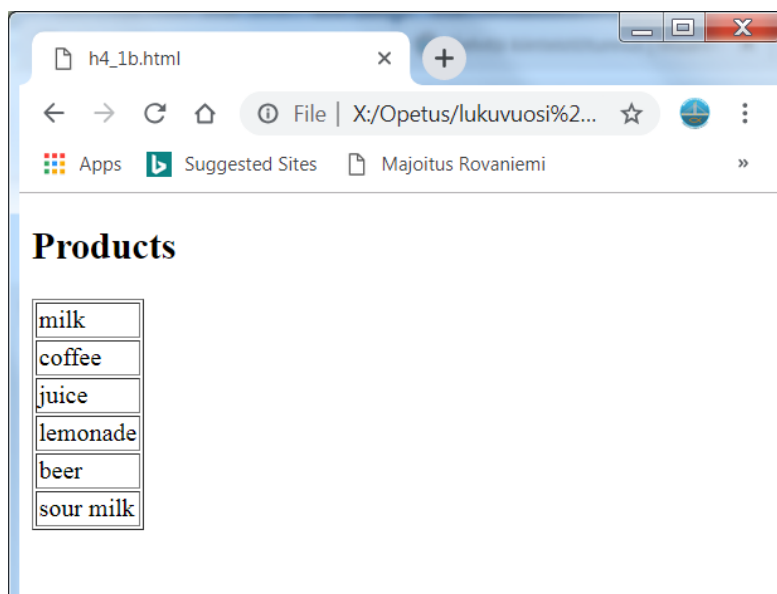
a. ForEach, 0.5p

Display the array on the website using forEach method.



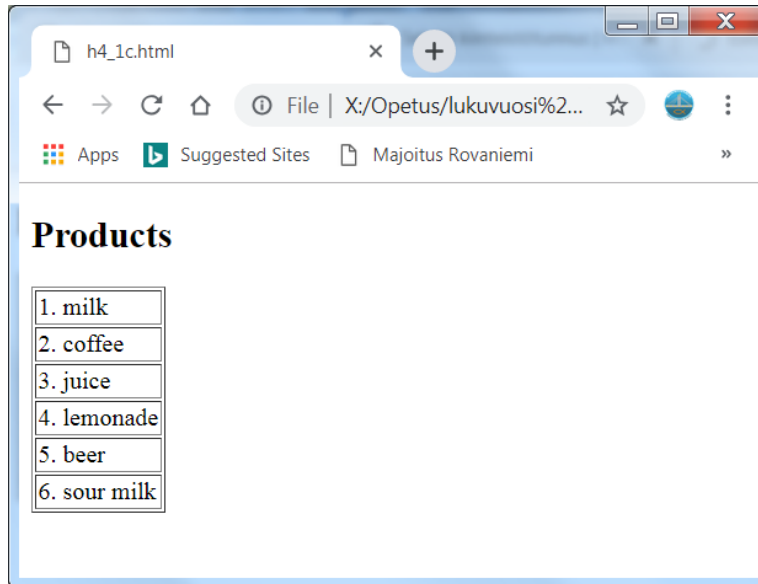
b. forEach ja HTML table, 0.5p

Print the array on HTML table using forEach method



c. Map, 0.5p

Create a new array from the original one. Original array is the same array as in the previous exercises. New array should have the index number in front of the product. You should use map function to do this. Display the new array in HTML table
:



d. Filter, 0.5p

Create a new array by filtering the original products array. You should take to new array only those products starting with letter 'm' or 'j'. Display the results on the screen (does not need to be HTML table)

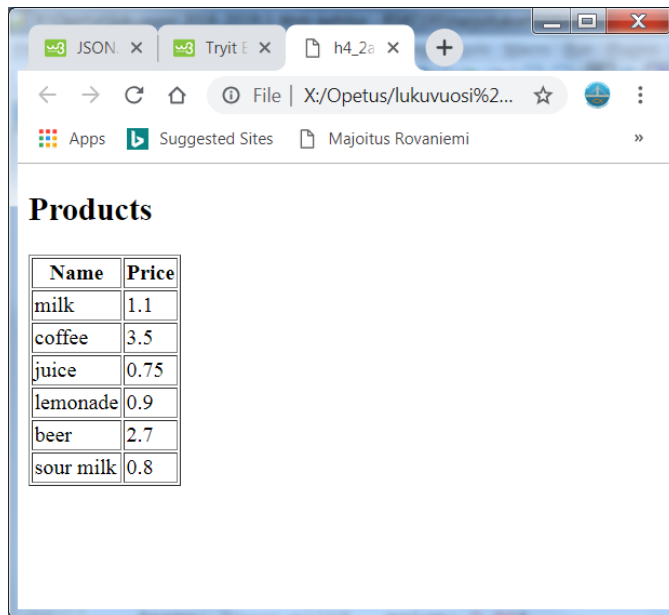
2. Arrays with objects + array iteration methods – max 2p

Create the following array in your code:

```
var products = [  
  {name: "milk", price: 1.10},  
  {name: "coffee", price: 3.50},  
  {name: "juice", price: 0.75},  
  {name: "lemonade", price: 0.90},  
  {name: "beer", price: 2.70},  
  {name: "sour milk", price: 0.80}  
];
```

a. object arrayn käsittely, 1p

Display the objects in the HTML table. You should use forEach method.



The screenshot shows a web browser window with a single tab titled 'h4_2a'. The address bar shows a file path: 'X:/Opetus/lukuvuosi%2...'. Below the browser window, a table titled 'Products' is displayed. The table has two columns: 'Name' and 'Price'. The data rows are as follows:

Name	Price
milk	1.1
coffee	3.5
juice	0.75
lemonade	0.9
beer	2.7
sour milk	0.8

b. Filter, 1p

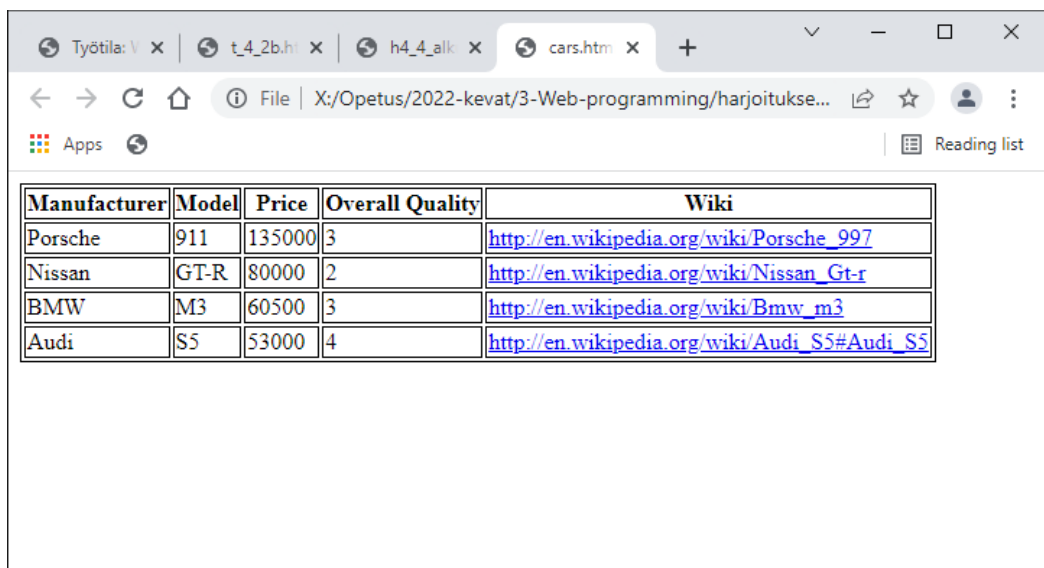
Use the filter method and display only the products which price is less than 2€.

3. Arrays – max 1p

Copy the cars object from the moodle under the exercise (cars.txt)

- a. From each car show the following information on the HTML table:
manufacturer, model, price, quality and link to wikipedia

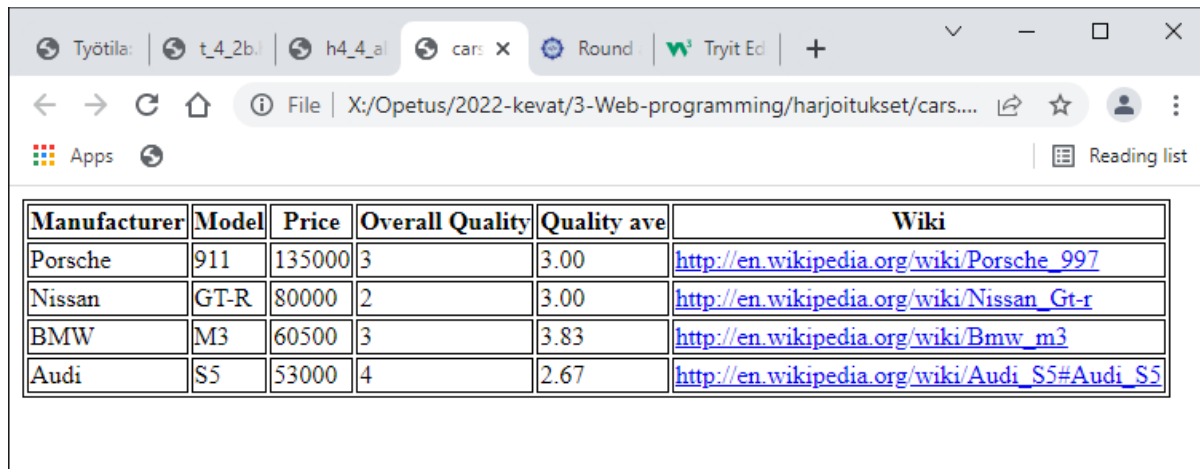
in the quality column you should display only the overall grade (1p)



The screenshot shows a web browser window with multiple tabs. The active tab is 'cars.htm'. The address bar shows a file path: 'X:/Opetus/2022-kevat/3-Web-programming/harjoitukse...'. Below the browser window, a table is displayed with the following data:

Manufacturer	Model	Price	Overall Quality	Wiki
Porsche	911	135000	3	http://en.wikipedia.org/wiki/Porsche_997
Nissan	GT-R	80000	2	http://en.wikipedia.org/wiki/Nissan_Gt-r
BMW	M3	60500	3	http://en.wikipedia.org/wiki/Bmw_m3
Audi	S5	53000	4	http://en.wikipedia.org/wiki/Audi_S5#Audi_S5

- b. In addition show the column **Quality average**. You should count the average of the quality ratings given to the car. Round the average always to 2 decimals. Hint: `average.toFixed(2)`



The screenshot shows a web browser window with a table of car data. The browser's address bar shows the file path: `X:/Opetus/2022-kevat/3-Web-programming/harjoitukset/cars....`. The table has six columns: **Manufacturer**, **Model**, **Price**, **Overall Quality**, **Quality ave**, and **Wiki**. The data rows are as follows:

Manufacturer	Model	Price	Overall Quality	Quality ave	Wiki
Porsche	911	135000	3	3.00	http://en.wikipedia.org/wiki/Porsche_997
Nissan	GT-R	80000	2	3.00	http://en.wikipedia.org/wiki/Nissan_Gt-r
BMW	M3	60500	3	3.83	http://en.wikipedia.org/wiki/Bmw_m3
Audi	S5	53000	4	2.67	http://en.wikipedia.org/wiki/Audi_S5#Audi_S5