

Comp 125 - Visual Information Processing

Spring Semester 2019 - Week 5 - Friday

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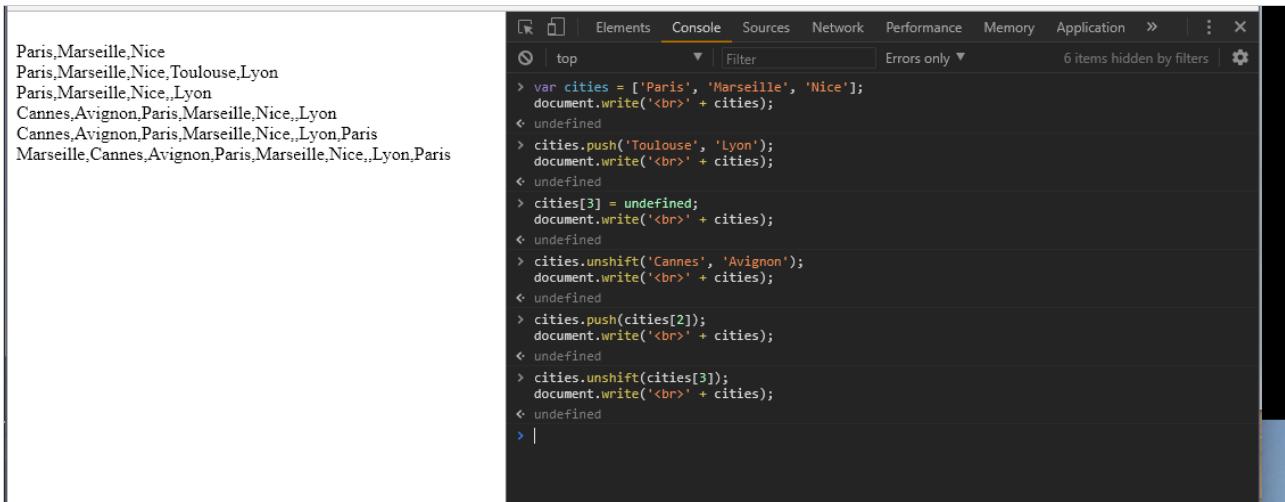
Fun exercise - using arrays

- create a new array, named **cities**, with the following values
 - *Paris, Marseille, Nice*
- add the following values to the end of the array
 - *Toulouse, Lyon*
- remove the fourth value from the array
- add the following values to the start of the array
 - *Cannes, Avignon*
- move the third value in the array to the end of the array
- move the fourth value in the array to the start of the array

Output each answer to the document with a line break between each result.

Fun exercise - using arrays

answer variant I...



The screenshot shows a browser's developer tools with the "Console" tab selected. The output pane displays the following text:

```
Paris,Marseille,Nice
Paris,Marseille,Nice,Toulouse,Lyon
Paris,Marseille,Nice,Lyon
Cannes,Avignon,Paris,Marseille,Nice,Lyon
Cannes,Avignon,Paris,Marseille,Nice,Lyon,Paris
Marseille,Cannes,Avignon,Paris,Marseille,Nice,Lyon,Paris
```

The input pane shows the corresponding JavaScript code:

```
> var cities = ['Paris', 'Marseille', 'Nice'];
> document.write('<br>' + cities);
< undefined
> cities.push('Toulouse', 'Lyon');
document.write('<br>' + cities);
< undefined
> cities[3] = undefined;
document.write('<br>' + cities);
< undefined
> cities.unshift('Cannes', 'Avignon');
document.write('<br>' + cities);
< undefined
> cities.push(cities[2]);
document.write('<br>' + cities);
< undefined
> cities.unshift(cities[3]);
document.write('<br>' + cities);
< undefined
> |
```

[Fun Exercise - using arrays - variant I](#)

Fun exercise - using arrays

answer variant 2...

```
Cities = Paris,Marseille,Nice  
First update = Paris,Marseille,Nice,Toulouse,Lyon  
Second update = Paris,Marseille,Nice,Lyon  
Third update = Cannes,Avignon,Paris,Marseille,Nice,Lyon  
Fourth update = Cannes,Avignon,Marseille,Nice,Lyon,Paris  
Fifth update = Nice,Cannes,Avignon,Marseille,Lyon,Paris
```

```
Elements Console Sources Network Performance Memory ...  
Console tab selected, top selected  
> var cities = ['Paris', 'Marseille', 'Nice'];  
> document.write('<br>Cities = ' + cities);  
< undefined  
> cities.push('Toulouse', 'Lyon');  
> document.write('<br>First update = ' + cities);  
< undefined  
> var cities2 = [cities[0], cities[1], cities[2], cities[4]];  
> document.write('<br>Second update = ' + cities2);  
< undefined  
> cities2.unshift('Cannes', 'Avignon');  
> document.write('<br>Third update = ' + cities2);  
< undefined  
> var cities3 = [cities2[0], cities2[1], cities2[3], cities2[4], cities2[5], cities2[2]];  
> document.write('<br>Fourth update = ' + cities3);  
< undefined  
> var cities4 = [cities3[3], cities3[0], cities3[1], cities3[2], cities3[4], cities3[5]];  
> document.write('<br>Fifth update = ' + cities4);  
< undefined  
>
```

Fun Exercise - using arrays - variant 2

Fun exercise - using arrays

answer variant 3...

```
Paris,Marseille,Nice  
Paris,Marseille,Nice,Toulouse,Lyon  
Paris,Marseille,Nice,Lyon  
Cannes,Avignon,Paris,Marseille,Nice,Lyon  
Cannes,Avignon,Paris,Marseille,Nice,Lyon,Paris  
Marseille,Cannes,Avignon,Paris,Marseille,Nice,Lyon,Paris  
Marseille,Cannes,Avignon  
Nice,Lyon,Paris  
New cities array = Marseille,Cannes,Avignon,Nice,Lyon,Paris
```

The screenshot shows a browser's developer tools console with the 'Console' tab selected. The code is as follows:

```
> var cities = ['Paris', 'Marseille', 'Nice'];
< undefined
> document.write('<br>' + cities);
< undefined
> cities.push('Toulouse', 'Lyon');
< undefined
> document.write('<br>' + cities);
< undefined
> cities.splice(3,1);
< undefined
> document.write('<br>' + cities);
< undefined
> cities.unshift('Cannes', 'Avignon');
< undefined
> document.write('<br>' + cities);
< undefined
> cities.push(cities[2]);
< undefined
> document.write('<br>' + cities);
< undefined
> cities.unshift(cities[3]);
< undefined
> document.write('<br>' + cities);
< undefined
> var cities1 = cities.slice(0, 3)
< undefined
> document.write('<br>' + cities1);
< undefined
> var cities2 = cities.slice(5)
< undefined
> document.write('<br>' + cities2);
< undefined
> var cities = cities1.concat(cities2);
< undefined
> document.write('<br>New cities array = ' + cities);
< undefined
> |
```

Fun Exercise - using arrays - variant 3

References

- MDN - JavaScript data types and data structure
- W3Schools - Arrays
 - *MDN - Array*