

04.03 Lab Exercises - SOLUTION

array methods

1. Make a pets array containing 'cat', 'dog' and 'hamster':

```
const pets = ['cat', 'dog', 'hamster'];  
console.log('pets:', pets); // ['cat', 'dog', 'hamster']
```

array.push() adds item to end of array

2. Push 'iguana' into the array:

```
pets.push('iguana');  
console.log('pets:', pets); // ['cat', 'dog', 'hamster', 'iguana']
```

3. Push 'parrot' into the array:

```
pets.push('parrot');  
console.log('pets:', pets);  
// ['cat', 'dog', 'hamster', 'iguana', 'parrot']
```

4. Push 'snake' into the array:

```
pets.push('snake');  
console.log('pets:', pets);  
// ['cat', 'dog', 'hamster', 'iguana', 'parrot', 'snake']
```

array.pop() removes item from end of array

5. remove (pop) the last item, which is 'snake':

```
pets.pop(); // remove last item, which is the snake  
console.log('pets:', pets);  
pets.push('snake');
```

6. Put (push) back 'snake':

```
console.log('pets:', pets);  
// ['cat', 'dog', 'hamster', 'iguana', 'parrot', 'snake']  
let poppedPet = pets.pop();
```

7. Pop 'snake' again, but this time save it as the return value:

```
let poppedPet = pets.pop();
console.log('poppedPet:', poppedPet); // snake
console.log('pets:', pets);
// ['cat', 'dog', 'hamster', 'iguana', 'parrot']
```

array.unshift() adds item to beginning of array

8. Add 'bunny' to the beginning of pets array

```
pets.unshift('bunny');
console.log('pets:', pets);
// ['bunny', 'cat', 'dog', 'hamster', 'iguana', 'parrot']
```

array.shift() method removes first item of array

9. Remove 'bunny':

```
pets.shift();
console.log('pets:', pets); // ['cat', 'dog', 'hamster', 'iguana',
'parrot']
```

array1.concat(array2) combines 2 or more arrays

10. Combine pets and morePets into the petsGalore array:

```
const morePets = ['canary', 'gerbil', 'kitten', 'python', 'turtle'];
const petsGalore = pets.concat(morePets);
// combine pets and morePets into new array, petsGalore
console.log('pets:', pets);
console.log('morePets:', morePets);
console.log('petsGalore:', petsGalore);
// ['cat', 'dog', 'hamster', 'iguana', 'parrot', 'canary', 'gerbil',
'kitten', 'python', 'turtle']
```

array.sort() from A-Z

11. Sort the petsGalore array:

```
petsGalore.sort();
console.log('petsGalore sorted:', petsGalore);
```

```
// ['canary', 'cat', 'dog', 'gerbil', 'hamster', 'iguana', 'kitten',  
'parrot', 'python', 'turtle']
```

array.splice(index, count)

12. get rid of the first two items but save them to a var called twoSplicedPets:

```
let twoSplicedPets = petsGalore.splice(0, 2);  
console.log('twoSplicedPets:', twoSplicedPets); // ['canary', 'cat']  
console.log('petsGalore spliced:', petsGalore);  
// ['dog', 'gerbil', 'hamster', 'iguana', 'kitten', 'parrot',  
'python', 'turtle']
```

13. starting at the 4th item in petsGalore, splice 3 items in a row; save the items as threeSplicedPets:

```
let threeSplicedPets = petsGalore.splice(3, 3);  
console.log('threeSplicedPets:', threeSplicedPets);  
// ['iguana', 'kitten', 'parrot']  
console.log('petsGalore spliced:', petsGalore);  
// ['dog', 'gerbil', 'hamster', 'python', 'turtle']
```

14. Using concat(), restore petsGalore to its original state of 10 pets and sort it from A-Z:

```
const petsGaloreRestored = petsGalore.concat(twoSplicedPets,  
threeSplicedPets).sort();  
console.log('petsGalore restored:', petsGaloreRestored);
```

15. Make a string connected by & of all items:

```
let petsStr = petsGalore.join( ' & '); // array.join() is called on an  
array and returns a string of all items  
console.log('petsStr:', petsStr);
```

NEXT: Lesson 04.04