Lab 04.04 - SOLUTION

Solution code in **04.03-Lab-Solution.html**, in the **script** tags:

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

```
const pets = ['cat', 'dog', 'bunny'];

console.log(pets); // ['cat', 'dog', 'bunny']
```

2. Use an array method to add 'iguana' and 'parrot' to the end of the array.

```
pets.push('iguana', 'parrot');

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

3. Use an array method to insert 'hamster' between 'dog' and 'bunny'.

```
pets.splice(2, 0, 'iguana');

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

4. Use an array method to make 'snake' the first pet.

```
pets.unshift('snake');

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

5. Use an array method to put the pets in alphabetical order (A-Z).

```
pets.sort();

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

6. Use array methods to move the next to last pet to the beginning of pets. The next to last pet happens to be 'parrot'. Don't remove any pets or write any pet names:

```
let lastIndex = pets.length - 1;
let nextToLastItem = pets.splice(lastIndex - 1, 1);
pets.unshift(nextToLastItem);

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

7. The dog and cat don't like being next to each other, but they both like the bunny, so put the bunny between them. Don't remove any pets or write any pet names:

```
let secondPet = pets.splice(1,1);
pets.splice(2, 0, secondPet);

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

8. Given pets2, combine both arrays into a new array called petShopArr, and then alphabetize petShopArr:

```
const pets2 = ['canary', 'turtle', 'gerbil', 'tarantula', 'goldfish'];
const petShopArr = pets.concat(pets2);
petShopArr.sort();

console.log('petShopArr:', petShopArr);
// petShop: ['bunny', 'parrot', 'canary', 'cat', 'dog', 'gerbil',
// 'goldfish', 'hamster', 'iguana', 'snake', 'tarantula', 'turtle']
```

9. Make a string called petsShopStr, consisting of all the pets in petShopArr, with the pets separated by ' & ':

```
let petsShopStr = petShopArr.join(' & ');

console.log(petsShopStr);
// canary & cat & dog & gerbil .. etc.
```

10. Given this nested array, two array methods to get the index of the dog. HINT: You need to make a new array.

```
const nestedPets = [
    ['bunny', 'parrot', 'canary'],
    ['cat', 'dog', 'gerbil'],
    ['goldfish', 'hamster', 'iguana'],
    ['snake', 'tarantula', 'turtle']
];
```

```
const flatPets = nestedPets.flat();
let dogIndex = flatPets.indexOf('dog');
consolelog("index of dog:", dogIndex);
```