35. Built-in array methods.

Filename: array_methods.js

Pre-reading:

Read this article to learn more about sorting ann array of strings.

- Using JavaScript's sort Method for Sorting Arrays of Strings

Exercise:

In this exercise, you will manipulate a list of the entire English alphabet.

```
alphabet = ["O", "U", "P", "H", "Q", "T", "Z", "Y", "E", "S",
"F", "C" , "R", "V", "J", "L", "X", "A", "M", "G", "D", "I",
"B", "W", " K "," N "]
```

a) Use the built-in methods in arrays to sort the list.
b) You should then print the first character in the list, but it should be a lowercase letter. (Hint: toLowerCase())

Solution:

```
var alphabet = ["O", "U", "P", "H", "Q", "T", "Z", "Y", "E", "S",
"F", "C", "R", "V", "J", "L", "X", "A", "M", "G", "D", "I", "B",
"W", "K","N"];

alphabet.sort();
console.log(alphabet[0].toLowerCase());
```

---

36. Smallest and largest.

Filename: sm_lg.js

Pre-reading:

Read this article to learn more about loops.

- JavaScript for Loop

Exercise:

a) Define a list that contains the following values: 6, 4, 1, 7, 2, 8, 3, 9, 11.

b) Use a for-loop to iterate through all the values in the list and find the smallest value. Print the smallest value. Do this without using JavaScript's built-in min function.

c) Use a new for-loop corresponding to problem b, but find and print the largest value.

Solution:

a)

```
const list = [6, 4, 1, 7, 2, 8, 3, 9, 11];
```

b)

```
var smallest = list[0];
for (num in list){
     if (num < smallest){
        smallest = list[num];
     }
}
console.log(smallest);
```

c)

```
var largest = list[0];
for (num in list)) {
      if  (num > largest) {
           largest = list[num];
     }
}
console.log(largest);
```
