Assignment 1:

In JavaScript, find, forEach, and map are three commonly used array methods. They are used to perform operations on arrays, making it easier to iterate, filter, and transform data. Here's a brief report on each:

1.find Method:

Description: The find method is used to retrieve the first element in an array that satisfies a provided testing function.

Syntax:

```
array.find(callback(element, index, array), thisArg);
```

Example:

```
const numbers = [1, 2, 3, 4, 5];
const evenNumber = numbers.find(num => num % 2 === 0);
console.log(evenNumber); // Output: 2
```

2. forEach Method:

Description: The forEach method executes a provided function once for each array element.

Syntax:

```
array.forEach(callback(currentValue, index, array), thisArg);
```

Example:

```
const fruits = ['apple', 'banana', 'orange'];
fruits.forEach(fruit => console.log(fruit));
// Output:
// apple
// banana
// orange
```

3. map Method:

Description: The map method creates a new array with the results of calling a provided function on every element in the array.

Syntax:

```
const newArray = array.map(callback(currentValue, index, array), thisArg);
```

Example:

```
const numbers = [1, 2, 3, 4, 5];
const squaredNumbers = numbers.map(num => num * num);
console.log(squaredNumbers); // Output: [1, 4, 9, 16, 25]
```