

1. Write script for following methods of Array object:

- a. Find()
- b. Filter()
- c. Map()
- d. Reduce()
- e. Slice()
- f. Splice()

Reference link - [https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global\\_Objects/Array/splice](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Array/splice)

2. Study closure in JavaScript and write script for the same.
3. Write a JavaScript function to merge two arrays and removes all duplicates elements

Test data :

```
var array1 = [1, 2, 3];  
var array2 = [2, 30, 1];  
console.log(merge_array(array1, array2));  
  
[3, 2, 30, 1]
```

4. Write a pattern that matches e-mail addresses.

The personal information part contains the following ASCII characters.

- Uppercase (A-Z) and lowercase (a-z) English letters.
- Digits (0-9).
- Characters ! # \$ % & ' \* + - / = ? ^ \_ ` { | } ~
- Character . ( period, dot or full stop) provided that it is not the first or last character and it will not come one after the other.

5. Write a JavaScript function to get the values of First and Last name of the following form:

Sample HTML file :

```
<!DOCTYPE html>  
  
<html><head>  
  
<meta charset=utf-8 />  
  
<title>Return first and last name from a form -  
w3resource</title>  
  
</head><body>  
  
<form id="form1" onsubmit="getFormvalue()">  
  
First name: <input type="text" name="fname" value="David"><br>  
Last name: <input type="text" name="lname" value="Beckham"><br>
```

```
<input type="submit" value="Submit">
</form>
</body>
</html>
```

6. Write a JavaScript program to remove items from a dropdown list.

Sample HTML file:

```
<!DOCTYPE html>
<html><head>
<meta charset=utf-8 />
<title>Remove items from a dropdown list</title>
</head><body><form>
<select id="colorSelect">
<option>Red</option>
<option>Green</option>
<option>White</option>
<option>Black</option>
</select>
<input type="button" onclick="removecolor()" value="Select and
Remove">
</form></body></html>
```

7. Write a JavaScript program to highlight the bold words of the paragraph, on mouse over a certain link.

Test data:

**Link text is – Click here to highlight bold words.**

8. Write a JavaScript function to get the month name from a particular date.

Test Data :

```
console.log(month_name(new Date("10/11/2009")));
```

```
console.log(month_name(new Date("11/13/2014")));
```

**Output :**

"October"

"November"

9. Write a JavaScript function to test whether a date is a weekend. Go to the editor

Note : Use standard Saturday/Sunday definition of a weekend.

Test Data :

```
console.log(is_weekend('Nov 15, 2014'));  
console.log(is_weekend('Nov 16, 2014'));  
console.log(is_weekend('Nov 17, 2014'));
```

**Output :**

"weekend"

"weekend"

Undefined

10. Write a JavaScript program to display the reading status (i.e. display book name, author name and reading status) of the following books.

```
var library = [  
  {  
    author: 'Bill Gates',  
    title: 'The Road Ahead',  
    readingStatus: true  
  },  
  {  
    author: 'Steve Jobs',  
    title: 'Walter Isaacson',  
    readingStatus: true  
  },  
  {  
    author: 'Suzanne Collins',  
    title: 'Mockingjay: The Final Book of The Hunger Games',  
    readingStatus: false  
  }  
];
```

11. Write a JavaScript program to create a Clock.

Note: The output will come every second.

*Expected Console Output:*

"14:37:42"

"14:37:43"

"14:37:44"

"14:37:45"

"14:37:46"

"14:37:47"

12. Write a JavaScript program to sort an array of JavaScript objects.

Sample Object:

```
var library = [  
  {  
    title: 'The Road Ahead',  
    author: 'Bill Gates',  
    libraryID: 1254  
  },  
  {  
    title: 'Walter Isaacson',  
    author: 'Steve Jobs',  
    libraryID: 4264  
  },  
  {  
    title: 'Mockingjay: The Final Book of The Hunger Games',  
    author: 'Suzanne Collins',  
    libraryID: 3245  
  }  
];
```

13. Study Promises in JavaScript and provide script for the same.