

# ARRAYS

## Assignment # 03

MODULE A -- Web and mobile application  
development

Programming Language: JavaScript

Topic: Array

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# ARRAYS

1. Declare and initialize a mixed array (Use all data types).
2. Declare and Initialize an array and store available mobile networks in Pakistan.
3. Declare and Initialize an array and store available education qualifications in Pakistan (e.g. SSC, HSC, BCS, BS, BCOM, MS, M. Phil., PhD). Show the listed qualifications in browser console.

4. Declare and initialize an empty array to store top cartoons. Add cartoon one by one in an array. Display the elements & length of array in browser console.

### **Top movies of 2015**

- 1) Avengers: Age of Ultron
- 2) Spectre
- 3) Jurassic World
- 4) Inside Out

**Length of the array: 4**

5. Declare and Initialize an array with your favorite cars. Show
  - a. First index of the array
  - b. Car at first index of the array
  - c. Last index of the array

d. Car at last index of the array

### **Favorite Cars**

Audi,Volvo,Ford,Lamborghini

First index of the array: 0

Car at first index of the array: Audi

Last index of the array: 3

Car at last index of the array: Lamborghini

6. Write a program to store 3 student names in an array. Take another array to store score of these three students. Assume that total marks are 500 for each student, display the scores & percentages of students like:

Score of Michael is 320. Percentage: 64%

Score of John is 230. Percentage: 46%

Score of Tony is 480. Percentage: 96%

7. Initialize an array with color names. Display the array elements in your browser.

Example: ['blue', 'white', 'black'];

- a. Ask the user what color he/she wants to add to the beginning & add that color to the beginning of the array. Display the updated array in your browser.
- b. Ask the user what color he/she wants to add to the end & add that color to the end of the array. Display the updated array in your browser.

- c. Add two more color to the beginning of the array. Display the updated array in your browser.

- d. Delete the first color in the array. Display the updated array in your browser.
  - e. Delete the last color in the array. Display the updated array in your browser.
  - f. Ask the user at which index he/she wants to add a color & color name. Then add the color to desired position/index. . Display the updated array in your browser.
  - g. Ask the user at which index he/she wants to delete color(s) & how many colors he/she wants to delete. Then remove the same number of color(s) from user-defined position/index. . Display the updated array in your browser.
8. Write a program to store student scores in an array & sort the array in ascending order using Array's sort method.

```
Scores of Students : 320,230,480,120  
Ordered Scores of Students : 120,230,320,480
```

9. Write a program to sort the below mentioned array: `var fruits = ["strawberry", "apple", "orange", "banana"];`

```
Fruits list:  
strawberry,apple,orange,banana
```

```
Ordered fruits list:  
apple,banana,orange,strawberry
```

10. Write a program to initialize an array with city names. Copy 3 array elements from ***cities*** array to ***selectedCities*** array.

Cities list:

Karachi,Lahore,Islamabad,Quetta,Peshawar

Selected cities list:

Islamabad,Quetta

11. Write a program to create a single string from the below mentioned array:

```
var arr = ["This ", " is ", " my ", " cat"];
```

Array:

This,is,my,cat

String:

This is my cat

12. Create a new array. Store values one by one in such a way that you can access the values in the order in which they were stored. (FIFO-First In First Out)

Devices:  
keyboard,mouse,printer,monitor

Out:  
keyboard

Out:  
mouse

Out:  
printer

Out:  
monitor

13. Create a new array. Store values one by one in such a way that you can access the values in reverse order. (Last In-First Out)

Devices:  
keyboard,mouse,printer,monitor

Out:  
monitor

Out:  
printer

Out:  
mouse

Out:  
keyboard



14. Declare and initialize a multidimensional array representing the following matrix:

0	1	2	3
1	0	1	2
2	1	0	1

15. How to access the first and last elements of the array:  
Array could be of any size.

Example:

```
var arr = ['john', 'smith', 'andrew', 'ahmed'];
```

First element: john.

Last element: ahmed.

16. You have an array, Set array length to 0.

Example:

```
var arr = ['john', 'smith', 'andrew', 'ahmed'];  
console.log(arr.length) // Result: 0
```

17. Make an array and ask for the user input and check if user input is exist in the given array.

18. You have an array of animals add these two animals after 2 elements (Zebra, Dinosaur)
19. Take a user input from user and check if the given string is palindrome.

Example:

```
var str = 'wow';
```

Ascending check: w, o , w.

Descending check: w, o , w.

20. You have an array of 10 elements, What is the index of the last element.
21. Extract keyword 'users' from the given url (Use array methods).  
Url: <https://jsonplaceholder.typicode.com/users>  
Expected output: users
22. Access 24 from multidimensional array:

```
var x = [  
    ['Jack', 24],  
    ['Sara', 23],  
    ['Peter', 24]  
];
```

Expected output: 24



