

ARRAYS AND LOOP

Assignment # 17-20
JAVASCRIPT

1. Declare and initialize an empty multidimensional array.
(Array of arrays)
2. Declare and initialize a multidimensional array representing the following matrix:

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

3. Write a program to print numeric counting from 1 to 10.

1
2
3
4
5
6
7
8
9
10

4. Write a program to print multiplication table of any number using for loop. Table number & length should be taken as an input from user.

Enter a number to show its multiplication table

OK

Cancel

Enter length multiplication table

Multiplication table of 2
Length 15

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

$$2 \times 7 = 14$$

$$2 \times 8 = 16$$

$$2 \times 9 = 18$$

$$2 \times 10 = 20$$

$$2 \times 11 = 22$$

$$2 \times 12 = 24$$

$$2 \times 13 = 26$$

$$2 \times 14 = 28$$

$$2 \times 15 = 30$$

5. Write a program to print items of the following array using for loop:
fruits = ["apple", "banana", "mango", "orange", "strawberry"]

```
apple  
banana  
mango  
orange  
strawberry
```

```
Element at index 0 is apple  
Element at index 1 is banana  
Element at index 2 is mango  
Element at index 3 is orange  
Element at index 4 is strawberry
```

6. Generate the following series in your browser. See example output.
- a. Counting: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
 - b. Reverse counting: 10, 9, 8, 7, 6, 5, 4, 3, 2, 1
 - c. Even: 0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20
 - d. Odd: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19
 - e. Series: 2k, 4k, 6k, 8k, 10k, 12k, 14k, 16k, 18k, 20k

Counting:

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15,

Reverse counting:

10, 9, 8, 7, 6, 5, 4, 3, 2, 1,

Even:

0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20,

Odd:

1, 3, 5, 7, 9, 11, 13, 15, 17, 19,

Series:

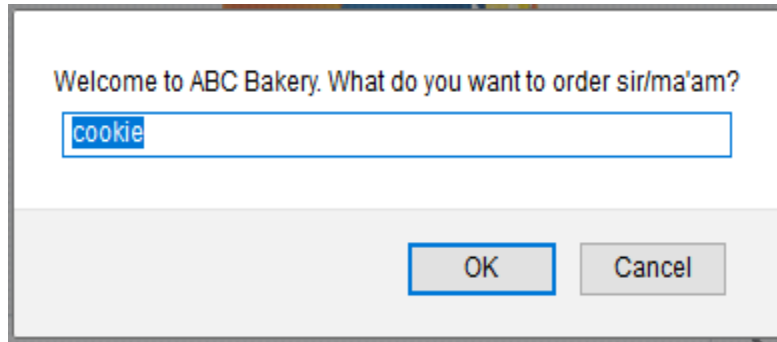
2k, 4k, 6k, 8k, 10k, 12k, 14k, 16k, 18k, 20k,

7. You have an array

A = ["cake", "apple pie", "cookie", "chips", "patties"]

Write a program to enable "search by user input" in an array.

After searching, prompt the user whether the given item is found in the list or not. Example:

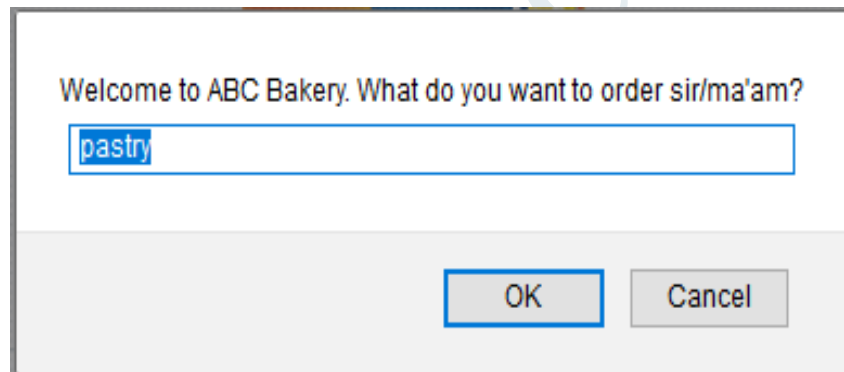


Welcome to ABC Bakery. What do you want to order sir/ma'am?

cookie

OK Cancel

cookie is **available** at index 2 in our bakery



Welcome to ABC Bakery. What do you want to order sir/ma'am?

pastry

OK Cancel

We are sorry. pastry is **not available** in our bakery

8. Write a program to identify the largest number in the given array.

A = [24, 53, 78, 91, 12].

Array items: 24,53,78,91,12
The largest number is 91

9. Write a program to identify the smallest number in the given array.

A = [24, 53, 78, 91, 12]

Array items: 24,53,78,91,12
The smallest number is 12

10. Write a program to print multiples of 5 ranging 1 to 100.

5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100,

11. Write a program that prints number from start of the array to desired stop value. Given array:

var scores = [12, 45, 3, 22, 34, 50];

(Hint: take stop value from user)

E.g. if user gives 3 as input value print 12, 45, 3

if user gives 34 as input value print 12, 45, 3, 22, 34

12. **The even/odd reporter**

Write a for loop that will iterate from 0 to 20. For each iteration, it will check if the current number is even or odd, and report that to the screen (e.g. "2 is even").

```
0 is even  
1 is odd  
2 is even  
3 is odd  
4 is even  
5 is odd  
6 is even  
7 is odd  
8 is even  
9 is odd  
10 is even  
11 is odd  
12 is even  
13 is odd  
14 is even  
15 is odd  
16 is even  
17 is odd  
18 is even  
19 is odd  
20 is even
```

13. Write a program to calculate the product of the odd integers from 1 to 7.

```
The product of the odd integers from 1 to 7 is 105
```

14. Write a program that will write out a wedge of stars. The user will enter the initial number of stars, and the program will write out lines of stars where each line has one few star than the previous line. Initial number of stars: 7

```

*****
*****
*****
****
***
**
*
```

15. Write a program to create the following patterns in your browser. Take number of lines as an input.

a. *****

b. *
 **

c. *****


```
**
```

```
*
```

d. *

```
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