



## Javascript Topic 5 – Part 1

### User Defined Functions, Events, Window Objects,

#### Timer Events

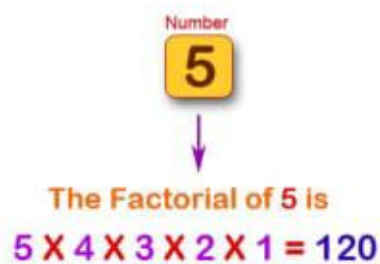


#### Lab Assignments:

- 1) Write a JavaScript function that checks whether a passed string is palindrome or not?

(A palindrome is word, phrase, or sequence that reads the same backward as forward. Ex: Madam, Malayalam)

- 2) Write a Recursive program for Factorial



- 3) Get runtime value from user. Write function to remove vowels from string and display the output.

- 4) Consider the two functions below. Will they both return the same thing? Why or why not?

```
function foo1()
{
    return {
        bar: "hello"
    };
}
```

```
function foo2()
{
    return
    {
        bar: "hello"
    };
}
```





## Javascript Topic 4 – Part 2

### Lab Assignments:

- 1) Write a program to reverse array values
- 2) Write a program to find count of spaces and count of words from given string
- 3) Write a program to reverse string value
- 4) To remove repeated characters in a string
- 5) Write a program to find total and average of given marks in array
- 6) To check whether year is leap year or not
- 7) To display current date and time with specific format (Ex: 12:30:22 PM)



## Javascript Topic 3 – Part 1

### Lab Assignments:

1) Print number from 1 to 50. If number is divisible by 3 print "Accord"

If number is divisible by 5 print "Info"

If number is divisible by 3&5 print "Accord Info Matrix"

2) Fibonacci series (Starts with a 0 and 1 and proceeds based on the rule that each number is equal to the sum of the preceding two numbers)

Ex: 0 1 2 3 5 8 13...

3) Factorial (Product of all integers less than or equal to n)

Ex: Input: 5      Output: 120      (Steps:  $1*2*3*4*5=120$ )

4) Prime Number (It will be divide by 1 and the same number itself)

Ex: 3, 7, 11, 13,....

5) 8\*8 chess board



6) Armstrong number (It is a number that is equal to the sum of cubes of its digits.)

Ex: 153, 370, 371, 407

Input: 153    Steps:  $(1*1*1) + (5*5*5) + (3*3*3) = 153$

7) Niven number (Number that is divisible by the sum of its digits)

Ex: Input: 45    Steps:  $4+5=9$ . You need to get remainder value as 0 when we divide 45 by 9

8) Multiplication table

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100



## Javascript Topic 2 – Part 2

### Control Structures



#### Lab Assignments:

- 1) Write a program to check given year is leap year or not
- 2) Write program for Factorial number (Product of all integers less than or equal to n)

**Input:** 5      **Output:** 120      (Steps:  $1*2*3*4*5=120$ )

- 3) Print Grade based on marks

Marks	Grade
100	O
90-99	A
80-89	B
70-79	C
60-69	D
50-59	E
Below 50	F





## Javascript Topic 2 – Part 1

### Control Structures



#### Lab Assignments:

- 1) Write a program to find the given number is odd or even
- 2) Find smallest of three numbers
- 3) Check whether the person is eligible to vote or not (Eligible Age: 18)
- 4) Calculate Electricity Bill

Units	Normal Charges Per Unit	Extra Charges Per Unit
<=100	0	-
101 to 250	2	25
251 to 450	4	75
>450	6	100





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## Javascript Topic 4 – Part 1

### Lab Assignments:

1) Find duplicate values from Array

Input: 10, 20, 45, 35, 20, 25

2) Find count of vowels from string

3) Palindrome (It is an sequence of words that reads the same backward as forward)

Ex: madam, Malayalam

4) Anagram (Both string have equal count and same characters)

Ex: silent, listen

5) Find maximum and minimum value from array

6) Sort array values in ascending order





## Javascript Topic 5 – Part 2

### User Defined Functions, Events, Window Objects,

#### Timer Events



#### Lab Assignments:

- 1) Create start, stop, pause buttons and implementing below logic using timer events.

**Start** -> When you click on start button it should display 1,2,3,..... In console window.

For every second it should increment one value.

**Stop** -> When you click on stop button, stop to print value, Reset to 0.

**Pause** -> When you click on pause button, stop to print value. But it should continue the value.

- 2) Create below design using HTML, CSS and implement calculator logic

Enter Value 1 and Value 2, click on any operation. Print output in Result box.

Value 1			
Value 2			
+	-	*	/
Result			





## Javascript Topic 1 – Part 1

### Javascript Introduction, Variable, Operators



#### Lab Assignments:

- 1) Print "Welcome to Javascript" in bold format using Javascript
- 2) Print confirmation value in console.



- 3) Create 5 different type of variable (integer, string, boolean, float, null) and print data type of values.
- 4) Get two numeric runtime values from user and add both value and print output in bold format like below

Value of A is: 5

Value of B is: 8

**Output: 13**







## Javascript Topic 3 – Part 2



## Lab Assignments:

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

```
1
2 1
3 2 1
4 3 2 1
5 4 3 2 1
```

```
1
0 1
1 0 1
0 1 0 1
1 0 1 0 1
```

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

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

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

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

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





## Javascript Topic 1 – Part 2

### Javascript Introduction, Variable, Operators



#### Lab Assignments:

1) Swap two numbers using third variable (You can create three variables like a, b, c)

```
Enter 1st Number: 101
Enter 2nd Number: 99
Before Swapping: First Number: 101 Second Number: 99
After Swapping: First Number: 99 Second Number: 101
```

2) Swap two numbers without using third variable (You must create two variables like a, b)

3) Find biggest of three numbers using conditional operator

4) Swap two numbers without using Arithmetic operator

