  
**JAVASCRIPT LOGICAL QUESTIONS**

**BATCH-OFSD23B (SET-1)**

1.Write a JavaScript function to generate a random integer.  
*Test Data* :  
console.log(rand(20,1));  
console.log(rand(1,10));  
console.log(rand(6));  
console.log(rand());  
15  
5  
1  
0

2.Write a JavaScript program to display the current day and time in the following format.   
*Sample Output :* Today is : Tuesday.  
Current time is : 10 PM : 30 : 38

3.Write a JavaScript program to get the current date.   
*Expected Output* :  
mm-dd-yyyy, mm/dd/yyyy or dd-mm-yyyy, dd/mm/yyyy

4.Write a JavaScript program to check whether a given matrix is an identity matrix.   
Note: In linear algebra, the identity matrix, or sometimes ambiguously called a unit matrix, of size n is the n ? n square matrix with ones on the main diagonal and zeros elsewhere.  
[[1, 0, 0], [0, 1, 0], [0, 0, 1]] -> true  
[[1, 0, 0], [0, 1, 0], [1, 0, 1]] -> false

5. Write a JavaScript function to get all possible subsets with a fixed length (for example 2) combinations in an array.  
*Sample array* : [1, 2, 3] and subset length is 2  
*Expected output* : [[2, 1], [3, 1], [3, 2], [3, 2, 1]]

6. Write a JavaScript function to check whether a string is blank or not.  
*Test Data* :  
console.log(is\_Blank(''));  
console.log(is\_Blank('abc'));  
true  
false

7.Write a JavaScript function to round a number to decimal place.  
*Test Data* :  
console.log(precise\_round(12.375,2));  
console.log(precise\_round(-10.3079499, 3));  
console.log(precise\_round(10.49999,0));  
console.log(precise\_round(10.49999,2));  
*Output* :  
12.38  
-10.308  
10  
10.50

8. Write a JavaScript program to display a random image (clicking on a button) from the following list.  
*Sample Image information* :

"<http://farm4.staticflickr.com/3691/11268502654_f28f05966c_m.jpg>", width: "240", height: "160"  
"<http://farm1.staticflickr.com/33/45336904_1aef569b30_n.jpg>", width: "320", height: "195"  
"<http://farm6.staticflickr.com/5211/5384592886_80a512e2c9.jpg>", width: "500", height: "343"

9.Write a JavaScript function that hides email addresses to prevent unauthorized access.  
*Test Data* :  
console.log(protect\_email("robin\_singh@example.com"));  
"robin...@example.com”

10.Write a JavaScript function to concatenate a given string n times (default is 1).  
*Test Data* :  
console.log(repeat('Ha!'));  
console.log(repeat('Ha!',2));  
console.log(repeat('Ha!',3));  
"Ha!"  
"Ha!Ha!"  
"Ha!Ha!Ha!"

**BATCH-OFSD23B (SET-2)**

11.Write a JavaScript function to convert an amount into coins.  
 *Sample function* : amountTocoins(46, [25, 10, 5, 2, 1])  
 Here 46 is the amount. and 25, 10, 5, 2, 1 are coins.  
 *Output* : 25, 10, 10, 1

12.Write a JavaScript program to get integers in the range (x, y) using recursion.   
*Example* : range(2, 9)  
*Expected Output :* [3, 4, 5, 6, 7, 8]

13. Write a JavaScript function to truncate a string if it is longer than the specified number of characters. Truncated strings will end with a translatable ellipsis sequence ("...") (by default) or specified characters.  
*Test Data* :  
console.log(text\_truncate('We are doing JS string exercises.'))  
console.log(text\_truncate('We are doing JS string exercises.',19))  
console.log(text\_truncate('We are doing JS string exercises.',15,'!!'))  
"We are doing JS string exercises."  
"We are doing JS ..."  
"We are doing !!"

14. Write a JavaScript for loop that iterates from 0 to 15. For each iteration, it checks if the current number is odd or even, and displays a message on the screen.  
*Sample Output :*  
"0 is even"  
"1 is odd"  
"2 is even"  
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15. Write a JavaScript conditional statement to find the largest of five numbers. Display an alert box to show the results.  
*Sample numbers* : -5, -2, -6, 0, -1  
*Output* : 0

16. Write a JavaScript function to get the values of First and Last names 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>

17. Write a JavaScript program to check whether a given number exists in the range 40..10000.

For example 40 presents in 40 and 4000.

18. Write a JavaScript program to compute the exponent of a number.   
Note : The exponent of a number says how many times the base number is used as a factor.  
82 = 8 x 8 = 64. Here 8 is the base and 2 is the exponent.

19.Write a JavaScript function that takes an array of numbers and finds the second lowest and second greatest numbers, respectively.  
 *Sample array :* [1,2,3,4,5]  
 *Expected Output :* 2,4

20. Write a JavaScript program that accepts a string as input and swaps the case of each character. For example if you input 'The Quick Brown Fox' the output should be 'tHE qUICK bROWN fOX'.