1. Write a JavaScript program which compute, the average marks of the following students Then, this average is used to determine the corresponding grade.

|  |  |
| --- | --- |
| **Student Name** | **Marks** |
| David | 80 |
| Vinoth | 77 |
| Divya | 88 |
| Ishitha | 95 |
| Thomas | 68 |

The grades are computed as follows :

|  |  |
| --- | --- |
| **Range** | **Grade** |
| <60 | F |
| <70 | D |
| <80 | C |
| <90 | B |
| <100 | A |

2. Write a JavaScript program to construct the following pattern, using a nested for loop.

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3. Write a JavaScript for loop that will iterate from 0 to 15. For each iteration, it will check if the current number is odd or even, and display a message to the screen.    
Sample Output :  
"0 is even"  
"1 is odd"  
"2 is even"

4. Write a JavaScript program which iterates the integers from 1 to 100. But for multiples of three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz".

5. Write a JavaScript program to sum the multiples of 3 and 5 under 1000.

6. Write a JavaScript conditional statement to sort three numbers. Display an alert box to show the result.    
*Sample numbers* : 0, -1, 4  
Output : 4, 0, -1

7.write a program to print

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8. Using a for loop output the elements in reverse order

let arr = [43, "what", 9, true, "cannot", false, "be", 3, true];

// Example output:

// true 3.5 be false cannot true 9 what 43 OR each item on a new line

9. Given two arrays of integers. Add up each element in the same position and  
create a new array containing the sum of each pair. Assume both arrays are of the same length.

let arr\_3 = [4, 6, 7];

let arr\_4 = [8, 1, 9];

// Example output:

// [12, 7, 16]

10. Given a string change the every second letter to an uppercase ‘Z’. Assume  
there are no space.

let str1 = "javascript";

// Example output:

// jZvZsZrZpZ OR each letter on a new line

11. Check if a string contains the letter “y”. Print “yes” if it does and “no” if it does not.

let str2 = "don’t know why";

// Example output:

// “yes”

12. Given a number n Calculate the factorial of the number

let n2 = 4; // 4 \* 3 \* 2 \* 1 = 24

// Example output:

// 24

13. Write a program that will allow someone to guess a four digit pin exactly 4  
times. If the user guesses the number correctly. It prints “That was  
correct!” Otherwise it will print “Sorry that was wrong.” Program stops after the 4th attempt of if they got it right.

let pin = 0704;

// Example output:

// Please make your guess:

// 4544

// Sorry that was wrong.

// Please make your guess:

// 4444

// Sorry that was wrong.

// Please make your guess:

// 0704

// That was correct!

14. Write a program that will check if two strings are palindromes. A palindrome is a word that spells the same forward and backward.  
Palindrome: a word, phrase, or sequence that reads the same backward as  
forward, e.g., madam or nurses run.

let str3 = "racecar";

let str4 = "Java";

// Example output:

// string1 palindrome?:

// Yes

// string2 palindrome?:

// No

15.

Get the sum of two arrays…actually the sum of all their elements.  
P.S. Each array includes only integer numbers. Output is a number too.

let arr\_1 = [3, 5, 22, 5, 7, 2, 45, 75, 89, 21, 2]; // --> 276

let arr\_2 = [9, 2, 42, 55, 71, 22, 4, 5, 90, 25, 26]; // --> 351

// Example output:

// 276 + 351 = 627