**Assignment: Level 1**

const countrie\_list = [

'Albania',

'Bolivia',

'Canada',

'Denmark',

'Ethiopia',

'Finland',

'Germany',

'Hungary',

'Ireland',

'Japan',

'Kenya'

]

const full\_stack\_technologies = [

'HTML',

'CSS',

'JavaScript',

'React',

'Redux',

'Node',

'MongoDB'

]

const mern\_stack = ['MongoDB', 'Express', 'React', 'Node']

1. Iterate 0 to 10 using for loop, do the same using while and do while loop
2. Iterate 10 to 0 using for loop, do the same using while and do while loop
3. Iterate 0 to n using for loop
4. Write a loop that makes the following pattern using console.log ():
5. #
6. ##
7. ###
8. ####
9. #####
10. ######

#######

1. Use loop to print the following pattern:
2. 0 x 0 = 0
3. 1 x 1 = 1
4. 2 x 2 = 4
5. 3 x 3 = 9
6. 4 x 4 = 16
7. 5 x 5 = 25
8. 6 x 6 = 36
9. 7 x 7 = 49
10. 8 x 8 = 64
11. 9 x 9 = 81

10 x 10 = 100

1. Using loop print the following pattern
2. i i^2 i^3
3. 0 0 0
4. 1 1 1
5. 2 4 8
6. 3 9 27
7. 4 16 64
8. 5 25 125
9. 6 36 216
10. 7 49 343
11. 8 64 512
12. 9 81 729

10 100 1000

1. Use for loop to iterate from 0 to 100 and print only even numbers
2. Use for loop to iterate from 0 to 100 and print only odd numbers
3. Use for loop to iterate from 0 to 100 and print only prime numbers
4. Use for loop to iterate from 0 to 100 and print the sum of all numbers.

The sum of all numbers from 0 to 100 is 5050.

1. Use for loop to iterate from 0 to 100 and print the sum of all evens and the sum of all odds.

The sum of all evens from 0 to 100 is 2550. And the sum of all odds from 0 to 100 is 2500.

1. Use for loop to iterate from 0 to 100 and print the sum of all evens and the sum of all odds. Print sum of evens and sum of odds as array

[2550, 2500]

1. Develop a small script which generate array of 5 random numbers
2. Develop a small script which generate array of 5 random numbers and the numbers must be unique
3. Develop a small script which generate a six characters random id:

5j2khz

**Assignment: Level 2**

1. Develop a small script which generate any number of characters random id:

fe3jo1gl124g

xkqci4utda1lmbelpkm03rba

1. Write a script which generates a random hexadecimal number.

'#ee33df'

1. Write a script which generates a random rgb colour number.

rgb(240,180,80)

1. Using the above countrie\_list array, create the following new array.

["ALBANIA", "BOLIVIA", "CANADA", "DENMARK", "ETHIOPIA", "FINLAND", "GERMANY", "HUNGARY", "IRELAND", "JAPAN", "KENYA"]

1. Using the above countrie\_list array, create an array for countrie\_list length'.

[7, 7, 6, 7, 8, 7, 7, 7, 7, 5, 5]

1. Use the countrie\_list array to create the following array of arrays:
2. [
3. ['Albania', 'ALB', 7],
4. ['Bolivia', 'BOL', 7],
5. ['Canada', 'CAN', 6],
6. ['Denmark', 'DEN', 7],
7. ['Ethiopia', 'ETH', 8],
8. ['Finland', 'FIN', 7],
9. ['Germany', 'GER', 7],
10. ['Hungary', 'HUN', 7],
11. ['Ireland', 'IRE', 7],
12. ['Iceland', 'ICE', 7],
13. ['Japan', 'JAP', 5],
14. ['Kenya', 'KEN', 5]

]

1. In above countrie\_list array, check if there is a country or countrie\_list containing the word 'land'. If there are countrie\_list containing 'land', print it as array. If there is no country containing the word 'land', print 'All these countrie\_list are without land'.

['Finland', 'Ireland', 'Iceland']

1. In above countrie\_list array, check if there is a country or countrie\_list end with a substring 'ia'. If there are countrie\_list end with, print it as array. If there is no country containing the word 'ai', print 'These are countrie\_list ends without ia'.

['Albania', 'Bolivia', 'Ethiopia']

1. Using the above countrie\_list array, find the country containing the biggest number of characters.

Ethiopia

1. Using the above countrie\_list array, find the country containing only 5 characters.

['Japan', 'Kenya']

1. Find the longest word in the full\_stack\_technologies array
2. Use the full\_stack\_technologies array to create the following array of arrays:

[["HTML", 4], ["CSS", 3], ["JavaScript", 10],["React", 5],["Redux", 5],["Node", 4],["MongoDB", 7]]

1. An application created using MongoDB, Express, React and Node is called a MERN stack app. Create the acronym MERN by using the array mern\_stack
2. Iterate through the array, ["HTML", "CSS", "JS", "React", "Redux", "Node", "Express", "MongoDB"] using a for loop or for of loop and print out the items.
3. This is a fruit array , ['banana', 'orange', 'mango', 'lemon'] reverse the order using loop without using a reverse method.
4. Print all the elements of array as shown below.
5. const full\_stack = [
6. ['HTML', 'CSS', 'JS', 'React'],
7. ['Node', 'Express', 'MongoDB']

]

HTML

CSS

JS

REACT

NODE

EXPRESS

MONGODB

**Assignment: Level 3**

1. Copy countrie\_list array (Avoid mutation)
2. Arrays are mutable. Create a copy of array which does not modify the original. Sort the copied array and store in a variable sorted\_countrie\_list
3. Sort the full\_stack\_technologies array and mern\_stack array
4. Extract all the countrie\_list contain the word 'land' from the countrie\_list array and print it as array
5. Find the country containing the highest number of characters in the countrie\_list array
6. Extract all the countrie\_list contain the word 'land' from the countrie\_list array and print it as array
7. Extract all the countrie\_list containing only four characters from the countrie\_list array and print it as array
8. Extract all the countrie\_list containing two or more words from the countrie\_list array and print it as array
9. Reverse the countrie\_list array and capitalize each country and stored it as an array