**First Task**

1-Free Drinks

- Burger more than 500tk: free Coke

- Else Coke: 30tk

2-BMI Calculator and Health Category

Create a JavaScript program that calculates the Body Mass Index (BMI) and assigns a health category based on the BMI value. Use nested if-else statements to determine the health category.

- Calculate BMI using the formula: BMI = weight (kg) / (height (m))^2

- BMI < 18.5, you are underweight.

- BMI >= 18.5 and BMI <=24.9, you are normal.

- BMI >=25 and BMI <= 29.9, you are overweight.

- Otherwise, you are obese.

3-Create a simple JavaScript program that takes a student's score as input and returns their corresponding grade based on the following grading scale:

A: 90-100

B: 80-89

C: 70-79

D: 60-69

F: 0-59

4-if you get more then 80 then inside your friend score.

If your friend get more than 80. then go for a lunch.

if your friend get below 80 but greater than or equal 60 then tell your friend, good luck next time.

if your friend get less than 60 but more than or equal to 40 then, keep your friend's message unseen.

if your friend get less than 40, block your friend

if you get less than 80 go to home and sleep and act sad

Note:

use nested if-else-if-else

4-you have two numbers in two variables, called: num1, num2

now declare a variable called result.

if num1 is bigger than num2 then result will be double of num1. if not, then the value of the variable result will be the sum of num1 and num2.

write a simple if-else.

also, write it using ternary operator.

5-Ticket fare Calculator

- Children (age < 10): free

- Students get a 50% discount

- Senior citizens (age >= 60) gets a 15% Discount

- Otherwise Regular ticket fare 800 tk

**js-loop-tasks**

1-Write a loop 1 to 200. Use break to exit the loop once you find 100.

2-Write a while loop that adds numbers starting from 1, but stops (using break) as soon as the sum reaches or exceeds 100

3-Write a loop that goes from 1 to 100, but stops (using break) when it encounters the first square number (like 4, 9, 16, etc.)

4-Write a loop to print even numbers from 1 to 40. Use continue to skip odd numbers.

5-display odd number from 55 to 85 and skip the numbers divisible by 5.

For for And While loop do this Task

6-"I will invest at least 6 hrs every single day for next 60 days!" this message 60 times. So display this.

7-Subtask-1:

Find all the odd numbers from 61 to 100.

Subtask-2:

Find all the even numbers from 78 to 98.

8-Subtask-1:

Display sum of all the odd numbers from 91 to 129.

Subtask-2:

Display sum of all the even numbers from 51 to 85.

9-Generate a multiplication table for number 9

10-Implement a countdown timer that counts down from 81 to 65.

11-As Ersa is learning now, she wants to explore more and more. Tell Ersa to generate a multiplication table for number 5(While)

12-Implement a countdown timer that counts down from 21 to 15.(While)

**js-object-tasks**

Task-1

Access the golden rod color value in output.

const colors = {

red: "#ff0000",

green: "#00ff00",

blue: "#0000ff",

"golden rod": '#daa520'

};

Task-2

For this object below add a property named passenger capacity with value 5

const car = {

make: "Toyota",

model: "Corolla",

year: 2020

};

Task-3

Display the physics marks as output.

const student = {

name: "Hamim Sakep",

id: 5421,

physics: {

subject: "HSC Physics",

author: "Shahjahan Tapan",

marks: 30

}

};

Task-4

Count the number of properties.

Input:

let student = {

name: 'Ariana Grande',

age: 21,

city: 'Gaibandha',

isStudent: true

};

Output:

Task-5 (Hard)

Loop through an object and print the key-value pairs with their types

Input:

let myObject = {

name: 'John Doe',

age: 25,

city: 'Example City',

isStudent: true

};

Output:

key: name | type: string

key: age | type: number

key: city | type: string

key: isStudent | type: Boolean

**array-looping-tasks**

Task 1

Write a JavaScript code to reverse the array colors without using the reverse method.

Input: const colors = ['red', 'blue', 'green', 'yellow', 'orange']

Output:

['orange', 'yellow', 'green', 'blue', 'red']

Task 2

Write a JavaScript code to get the even numbers from an array using any looping technique.

Input: const numbers = [12, 98, 5, 41, 23, 78, 46];

Output:

[12, 98, 76, 46]

Task 3

Use a for...of loop to concatenate all the elements of an array into a single string.

Input: var numbers = ['Tom', 'Tim', 'Tin', 'Tik']

Output:

'TomTimTinTik'

Task 4 (Hard)

Reverse the words of a sentence. Only the position of the word will be reversed. check out the output

Input: const statement = 'I am a hard working person'

Output:

'person working hard a am I'

**Simple function Related Practice Tasks**

**Task-1**

Take four parameters. Multiply the four numbers and then return the result

**Task-2**

Take a number if the number is odd multiply it by 2 and return the result. If the number is even divide it by two and return the result.

**Task-3**

Write a function called make\_avg() which will take an array of integers and the size of that array and return the average of those values.

**Task-4**

Write a function called count\_zero() which will take a binary string (Binary string is a string which is consist of only 0 and 1) as parameter and count how many 0’s are there in that string.

**Task-5**

Write a function called odd\_even() which takes an integer value and tells whether this value is even or odd. If even return Even. If odd return Odd

**js-problems-part1-practice-tasks**

**Task-1:**

Write a function to convert temperature from Celsius to Fahrenheit.

**Task-2:**

You are given an array of numbers. Count how many times the a number is repeated in the array.

sample-input: numbers = [5,6,11,12,98, 5]

find: 5

output: 2

sample-input:

numbers = [5,6,11,12,98, 5]

find: 25

output: 0

**Task-3:**

Write a function to count the number of vowels in a string.

**Task-4:**

Write a function to find the longest word in a given string.

sample-input: I am learning Programming to become a programmer

sample-output: Programming

**Task-5:**

Generate a random number between 10 to 20.

**js-problems-part2-practice-tasks**

**Task -1:**

Find the lowest number in the array below.  
const heights2 = [167, 190, 120, 165, 137];

**Task -2:**

Find the friend with the smallest name.  
const heights2 = ['rahim', 'robin', 'rafi', 'ron', 'rashed'];

**Task-3:**

Your task is to calculate the total budget required to buy electronics:

laptop = 35000 tk

tablet = 15000 tk

mobile = 20000 tk

Write a JavaScript function named calculateElectronicsBudget that takes in the number of laptop, tablets, and mobile and returns the total money required.

**Task-4:**

You are given an array of phone objects, each containing information about the model, brand, and price. Your task is to write a JavaScript function named findAveragePhonePrice that takes this array as input and returns the average price of phone.

**Input**

const phones = [

{ model: "PhoneA", brand: "Iphone", price: 95000 },

{ model: "PhoneB", brand: "Samsung", price: 40000 },

{ model: "PhoneC", brand: "Oppo", price: 26000 },

{ model: "PhoneD", brand: "Nokia", price: 35000 },

{ model: "PhoneE", brand: "Iphone", price: 105000 },

{ model: "PhoneF", brand: "HTC", price: 48000 },

];

**Task -5: (Hard)**

For each employee their current salary is calculated by multiplying yearly increment with experience then adding the result to the starting salary. Now calculate is the total salary has to be provided by the company in a month.

const employees = [

{ name: "shahin", experience: 5, starting: 20000, increment: 5000 },

{ name: "shihab", experience: 3, starting: 15000, increment: 7000 },

{ name: "shikot", experience: 9, starting: 30000, increment: 1000 },

{ name: "shohel", experience: 0, starting: 29000, increment: 4000 },

];