

Name: Ariba Shuaib

Registration Number: 230201075

Department and batch: CS O4 (A)

Semester: 5th semester

LAB REPORT 4

WEB TECHNOLOGIES

JavaScript Fundamentals & DOM Manipulation



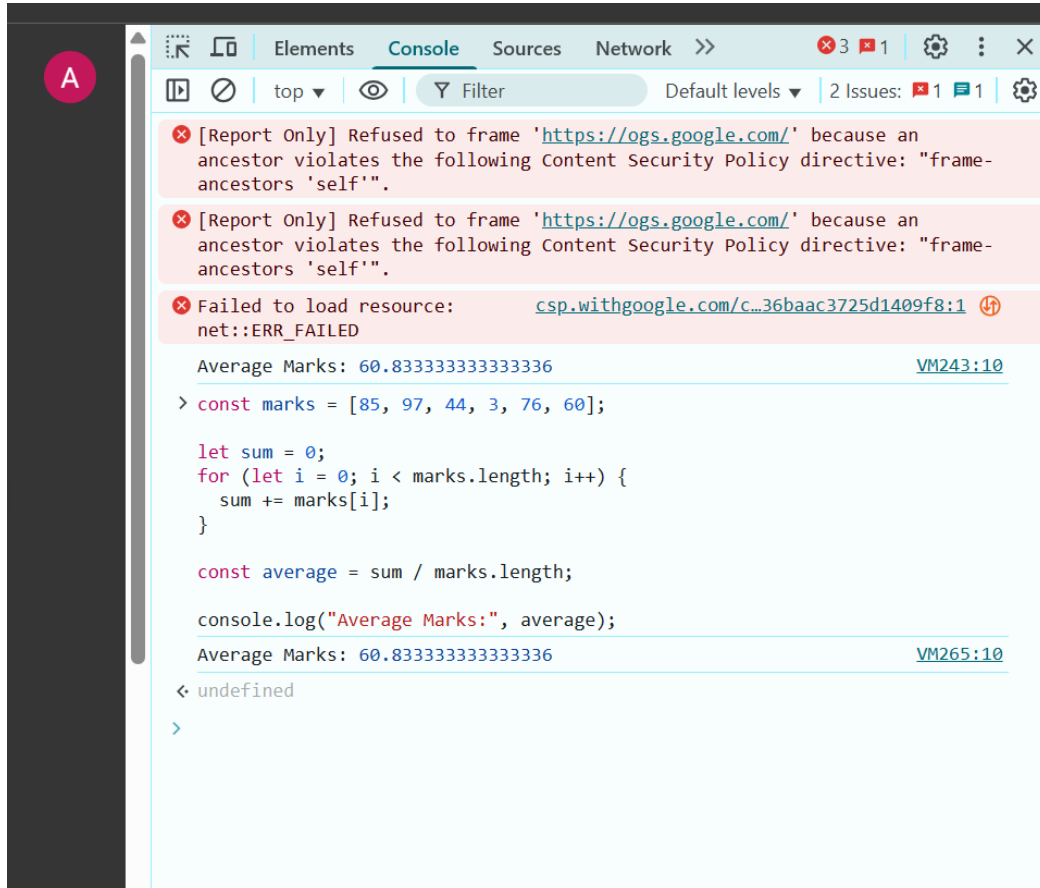
Institute of Space and Technology

Submitted to: Miss Maryam

Practice Task

Q6. For a given array with marks of students -> [85, 97, 44, 37, 76, 60]

Find the average marks of the entire class.



The screenshot shows a web browser's developer console with the 'Console' tab selected. At the top, there are three error messages: two '[Report Only] Refused to frame' errors and one 'Failed to load resource' error. Below the errors, the console displays the output of a JavaScript script. The script defines an array 'marks' with values [85, 97, 44, 3, 76, 60] (note the typo '3' in the image). It then calculates the sum of the array elements using a for loop and divides it by the length of the array to find the average. The result, 'Average Marks: 60.833333333333336', is logged to the console. The console also shows 'undefined' at the bottom, likely from a subsequent log statement.

```
> const marks = [85, 97, 44, 3, 76, 60];

let sum = 0;
for (let i = 0; i < marks.length; i++) {
  sum += marks[i];
}

const average = sum / marks.length;

console.log("Average Marks:", average);
Average Marks: 60.833333333333336
< undefined
>
```

Q5. Create an array to store companies -> “Bloomberg”, “Microsoft”, “Uber”, “Google”, “IBM”, “Netflix”

- Remove the first company from the array
- Remove Uber & Add Ola in its place
- Add Amazon at the end

```

< undefined
> let companies = ["bloomberg", "microsoft", "uber", "google", "ibm",
  "netflix"];

// a) Remove the first company
companies.shift();

// b) Remove "uber" and add "ola" in its place
companies.splice(1, 1, "ola"); // 1 → index of "uber", 1 → remove one
item, add "ola"

// c) Add "amazon" at the end
companies.push("amazon");

console.log(companies);

```

VM269:12

```

(6) ['microsoft', 'ola', 'google', 'ibm', 'netflix', 'amazon'] i
  0: "microsoft"
  1: "ola"
  2: "google"
  3: "ibm"
  4: "netflix"
  5: "amazon"
  length: 6
  [[Prototype]]: Array(0)

```

< undefined

>

Q4. Get user to input a number using prompt("Enter a number:"). Check if the number is a multiple of 5 or not.

```

> let num = prompt("Enter a number:");
  if (num % 5 === 0) {
    alert(num + " is a multiple of 5");
  } else {
    alert(num + " is not a multiple of 5");
  }

```

chrome://new-tab-page says

Enter a number:

OK
Cancel

4 is not a multiple of 5 ✖

Q2. Create a game where you start with any random game number. Ask the user to keep guessing the game number until the user enters correct value.

```
> let gameNum = Math.floor(Math.random() * 10) + 1; // random number
  between 1 and 10
let userNum = prompt("Guess the game number (1-10):");

while (userNum != gameNum) {
  userNum = prompt("Wrong guess! Try again:");
}

alert("Congratulations! You guessed it right");
```

chrome://new-tab-page says

Congratulations! You guessed it right

OK

Q3. Prompt the user to enter their full name. Generate a username for them based on the input.

Start username with @, followed by their full name and ending with the fullname length.

eg: user name = "aliahmed", username should be "@aliahmed8"

```
> let fullName = prompt("Enter your full name:");
let userName = "@" + fullName + fullName.length;

alert("Your username is: " + userName);

< undefined
```

chrome://new-tab-page says

Your username is: @AribaShuaib11

OK

Q1. Print all even numbers from 0 to 100.

```
> for (let i = 0; i <= 100; i++) {  
  if (i % 2 === 0) {  
    console.log(i);  
  }  
}
```

0	VM381:3
---	-------------------------

2	VM381:3
---	-------------------------

4	VM381:3
---	-------------------------

6	VM381:3
---	-------------------------

8	VM381:3
---	-------------------------

10	VM381:3
----	-------------------------

12	VM381:3
----	-------------------------

14	VM381:3
----	-------------------------

16	VM381:3
----	-------------------------

18	VM381:3
----	-------------------------

20	VM381:3
----	-------------------------

22	VM381:3
----	-------------------------

24	VM381:3
----	-------------------------

26	VM381:3
----	-------------------------

28	VM381:3
----	-------------------------

30	VM381:3
----	-------------------------

32	VM381:3
----	-------------------------

34	VM381:3
----	-------------------------