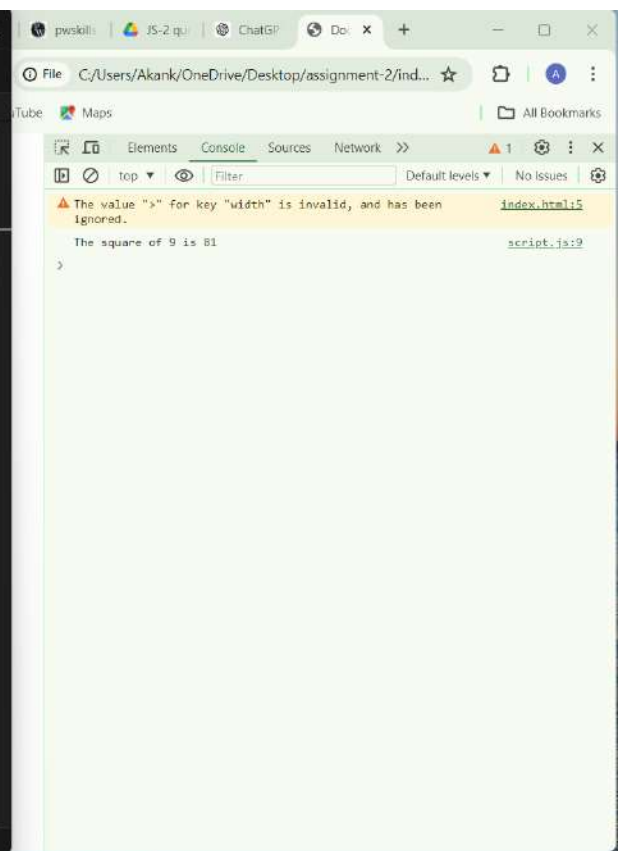


```
1 // Arrow function to calculate the square of a number
2 const square = (number) => {
3   return number * number;
4 };
5
6 // Using the square arrow function to calculate the square
7 const givenNumber = prompt("Enter a positive integer:");
8 const result = square(givenNumber);
9 console.log("The square of", givenNumber, "is", result);
10
```



```
1 const ages = [9, 9, 4, 0, 4, 4, 4];
2 // Find the min and max age
3 const minAge = Math.min(...ages);
4 const maxAge = Math.max(...ages);
5 // Find the median age
6 ages.sort((a, b) => a - b);
7 const middleIndex = Math.floor(ages.length / 2);
8 const medianAge =
9   ages.length % 2 === 0
10    ? (ages[middleIndex - 1] + ages[middleIndex]) / 2
11    : ages[middleIndex];
12 // Find the average age
13 const averageAge =
14   ages.reduce((acc, current) => acc + current, 0) / ages.length;
15
16 // Find the range of the ages
17 const range = maxAge - minAge;
18
19 // Compare the values of (min - average) and (max - average) using abs()
20 const minDiff = Math.abs(minAge - averageAge);
21 const maxDiff = Math.abs(maxAge - averageAge);
22
23 console.log(`Min Age: ${minAge}`);
24 console.log(`Max Age: ${maxAge}`);
25 console.log(`Median Age: ${medianAge}`);
26 console.log(`Average Age: ${averageAge.toFixed(2)}`);
27 console.log(`Range: ${range}`);
28 console.log(`Min Diff: ${minDiff.toFixed(2)}`);
29 console.log(`Max Diff: ${maxDiff.toFixed(2)}`);
```

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Elements Console Sources Network >> 1 No Issues

⚠ The value ">" for key "width" is invalid, and has been ignored. [index.html:5](#)

Min Age: 0	script.js:25
Max Age: 9	script.js:26
Median Age: 4	script.js:27
Average Age: 4.86	script.js:28
Range: 9	script.js:29
Min Diff: 4.86	script.js:30
Max Diff: 4.14	script.js:31

```
File Edit Selection ... ← → assignment-2
Welcome index.html JS script.js x
JS script.js > ...
1 // Create a Map to store contact information
2 const contactMap = new Map();
3 // Add some contact information to the Map
4 contactMap.set("John Doe", {
5   age: 30,
6   email: "john.doe@example.com",
7   location: "New York",
8 });
9 contactMap.set("Jane Doe", {
10  age: 25,
11  email: "jane.doe@example.com",
12  location: "Los Angeles",
13 });
14 contactMap.set("Bob Smith", {
15  age: 40,
16  email: "bob.smith@example.com",
17  location: "Chicago",
18 });
19 // Implement a function to retrieve contact details by name
20 function getContactDetailsByName(name) {
21   if (contactMap.has(name)) {
22     return contactMap.get(name);
23   } else {
24     return null;
25   }
26 }
27 // Test the function
28 console.log(getContactDetailsByName("John Doe")); // Output: { age: 30, email: 'john
29 console.log(getContactDetailsByName("Jane Doe")); // Output: { age: 25, email: 'jane
30 console.log(getContactDetailsByName("Bob Smith")); // Output: { age: 40, email: 'bob
Ln 17, Col 23 Spaces: 4 UTF-8 CRLF {} JavaScript ✓ Prettier
```

File C:/Users/Akank/OneDrive/Desktop/assig... ☆

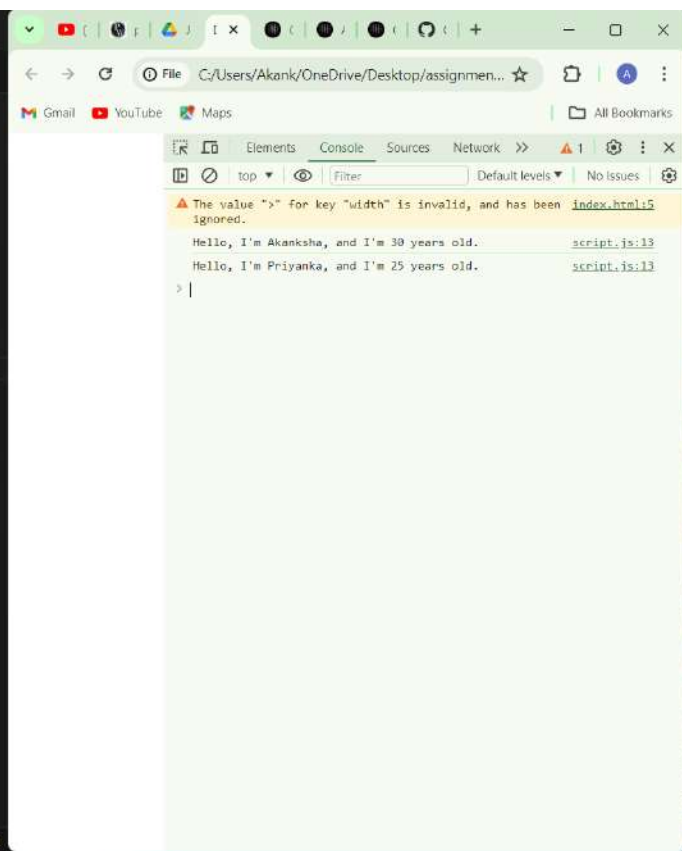
YouTube Maps

Elements Console Sources >> 2 No Issues

⚠ The value ">" for key "width" is invalid, and has been ignored.

```
script.js:28
{age: 30, email: 'john.doe@example.com', location: 'New York'}
script.js:29
{age: 25, email: 'jane.doe@example.com', location: 'Los Angeles'}
script.js:30
{age: 40, email: 'bob.smith@example.com', location: 'Chicago'}
```

```
File Edit Selection ... assignment-2
Welcome index.html JS script.js x
JS script.js > ...
1 const personOne = {
2   name: "Akanksha",
3   age: 30,
4 };
5
6 const personTwo = {
7   name: "Priyanka",
8   age: 25,
9 };
10
11 // Create a single function
12 function introduce(person) {
13   console.log(`Hello, I'm ${person.name}, and I'm ${person.age} years old.`);
14 }
15 introduce(personOne);
16 introduce(personTwo);
17
```



```
File Edit Selection ... ← → assignment-2
Welcome index.html JS script.js x
JS script.js > ...
1 // Create a Set to store unique numbers
2 const uniqueNumbers = new Set([1, 2, 3, 4, 5, 2, 3, 6, 7, 8, 9]);
3
4 // Create a Map to associate each number
5 const numberSquares = new Map();
6
7 for (const number of uniqueNumbers) {
8   numberSquares.set(number, number ** 2);
9 }
10
11 console.log("Unique Numbers and their Squares:");
12 for (const [number, square] of numberSquares.entries()) {
13   console.log(`Number: ${number}, Square: ${square}`);
14 }
15
```

File C:/Users/Akank/OneDrive/Desktop/assignmen... ☆

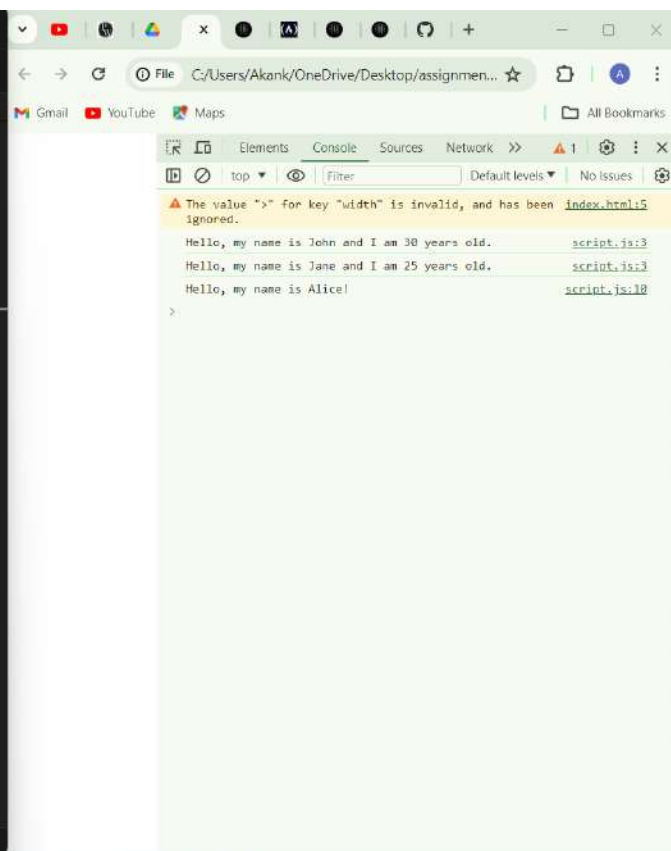
Maps

Elements Console Sources Network >> 1 No Issues

▲ The value ">" for key "width" is invalid, and has been ignored. [index.html:15](#)

Unique Numbers and their Squares:	script.js:13
Number: 1, Square: 1	script.js:15
Number: 2, Square: 4	script.js:15
Number: 3, Square: 9	script.js:15
Number: 4, Square: 16	script.js:15
Number: 5, Square: 25	script.js:15
Number: 6, Square: 36	script.js:15
Number: 7, Square: 49	script.js:15
Number: 8, Square: 64	script.js:15
Number: 9, Square: 81	script.js:15

```
1 // Create a function named displayInfo that takes two parameters (name & age)
2 function displayInfo(name, age) {
3   console.log(`Hello, my name is ${name} and I am ${age} years old.`);
4 }
5
6 displayInfo.call(null, "John", 30);
7
8 displayInfo.apply(null, ["Jane", 25]);
9 function greet() {
10  console.log(`Hello, my name is ${this.name}!`);
11 }
12
13 const person = { name: "Alice" };
14 const boundGreet = greet.bind(person);
15 boundGreet();
16
```




```
JS script.js > [0] calculator
2  const calculator = {
7    }, multiply: function (a, b) {
9  },
10  calculate: function (operation, a, b) {
11    switch (operation) {
12      case "add":
13        return this.add(a, b);
14      case "subtract":
15        return this.subtract(a, b);
16      case "multiply":
17        return this.multiply(a, b);
18      default:
19        throw new Error(`Invalid operation: ${operation}`);
20    }
21  },
22  };
23  console.log(calculator.calculate.call(calculator, "add", 2, 3)); // addit
24  console.log(calculator.calculate.apply(calculator, ["multiply", 4, 5]));
25  // Create another object named discountCalculator
26  const discountCalculator = {
27    discountPercentage: 0.1,
28    applyDiscount: function (price) {
29      return price * (1 - this.discountPercentage);
30    },
31  };
32  // Use bind to create a new function
33  const calculateDiscount =
34    | discountCalculator.applyDiscount.bind(discountCalculator);
35  // Use the calculateDiscount function to calculate the discounted price
36  console.log(calculateDiscount(100));
```

assignment-2

File C:/Users/Akank/OneDrive/Desktop/assignmen... ☆

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Elements Console Sources Network >> 1 No Issues

⚠ The value ">" for key "width" is invalid, and has been ignored. [index.html:5](#)

5	script.js:27
20	script.js:30
90	script.js:45

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