

Assignment 1

1. What is variable, Datatype and Operators in JavaScript.

Variables:-

Variables are Containers for Storing Data.

JavaScript Variables can be declared in 4 ways:

- Automatically
- Using var
- Using let
- Using const

Data Type:-

Data types describe the different types or kinds of data that we're gonna be working with and storing in variables. In Javascript, there are five basic, or primitive, types of data. The five most basic types of data are strings, numbers, booleans, undefined, and null. We refer to these as primitive data types.

Operators:-

Operators are used to assign values, compare values, perform arithmetic operations, and more. There are different types of JavaScript operators: Arithmetic Operators.

2. How hoisting is different in var, let and const variables?

let and const variables are hoisted, only they are hoisted without a default initialization. This makes them inaccessible (as such variables are in a temporal dead zone). Variables declared with var, on the other hand, are hoisted with a default initialization of undefined

3. What is the difference between

A. spread & rest operators

B. == and === operators

A. The spread operator in JavaScript expands values in arrays and strings into individual elements, whereas the rest operator puts the values of user-specified data into a JavaScript array.

B. = is called as assignment operator, == is called as comparison operator whereas It is also called as comparison operator. = does not return true or false, == Return true only if the two operands are equal while === returns true only if both values and data types are the same for the two variables.

4. • `const myCar = {
 brand: 'Ford',
 model: 'Mustang',`

```

        color: 'red'
    }

    const myNewCar = {
        type: 'car',
        year: 2021,
        color: 'yellow'
    }

```

```

let myycar = {
    ...myCar,
    ...myNewCar
};

```

```

console.log(myycar);

```

- **WA function to display prime numbers between 1 and 50**

```

let count=0
let i,j
for(j=2;j<=50;j++)
{
    for( i=1;i<=j;i++)
    {
        if(j%i==0)
            count++
    }
}

```

```

if(count==2)

```

```

    console.log(j)
    count=0

```

```

}

```

WA function that can take any number of arguments and return their sum

```

function add(x, y) {
    return x+y;
}
console.log(add(2, 3));    // 5
console.log(add(-1, 1));  // 0

```

```
console.log(add(1, 1, 1)); // 2
```

WAP that converts temperature given in degree Celcius to degree fahrenheit and vice versa

```
// program to convert celsius to fahrenheit
// ask the celsius value to the user
const celsius = prompt("Enter a celsius value: ");

// calculate fahrenheit
const fahrenheit = (celsius * 1.8) + 32

// display the result
console.log(`${celsius} degree celsius is equal to ${fahrenheit} degree
fahrenheit.`);
```