**JavaScript (26 june)**

1. **Difference between inline and multiline commenting format**
2. **Data types & variables**

**7 data types – string, number, undefined, Boolean, null, symbol, object**

**Difference between var, let, const**

1. **Operator -> +, - , , “,” , ; , =**
2. **Console.log()**
3. **If variable is not assigned and it is empty and if you print in cosole , it shows as “Null”**
4. **Difference between =, == and ===**
5. **Primitive Datatype and non-primitive datatype**

**Primitive Datatype - Stores one kind of datatype**

**Non-primitive – stores multiple kind of datatype**

1. **Blocked Scoped**

{

let a = 5;

const b = 5;

var c = 5;

}

// console.log(a); a is not defined

// console.log(b); b is not defined

console.log(c); // 5

1. **Exercise (Datatypes & variables)**

**1. What is the correct way to declare a variable in JavaScript?**

A. var myVariable;  
B. int myVariable;  
C. variable myVariable;  
D. string myVariable;

**2. Which of the following is a valid JavaScript data type?**

A. number  
B. digit  
C. float  
D. integer

**3. What is the output of the following code?**

var x = 5;

var y = "5";

console.log(x == y);

A. true  
B. false  
C. undefined  
D. null

**4. What is the output of the following code?**

var x = 5;

var y = "5";

console.log(x === y);

A. true  
B. false  
C. undefined  
D. null

**5. How do you declare a constant in JavaScript?**

A. const myConstant = 10;  
B. constant myConstant = 10;  
C. let myConstant = 10;  
D. var myConstant = 10;

**6. Which data type is used to represent true or false values in JavaScript?**

A. boolean  
B. bit  
C. binary  
D. truth

**7. What will be the result of the following code?**

let a;

console.log(a);

A. undefined  
B. null  
C. 0  
D. NaN

**8. How do you write a single-line comment in JavaScript?**

A. /\* This is a comment \*/  
B. <!-- This is a comment -->  
C. # This is a comment  
D. // This is a comment

**9. Which of the following is not a primitive data type in JavaScript?**

A. string  
B. number  
C. object  
D. boolean

**10. What is the result of the following code?**

let x = "Hello" + 5;

console.log(x);

A. Hello5  
B. Hello 5  
C. 5Hello  
D. undefined

**11. Which of the following methods can be used to convert a string to an integer in JavaScript?**

A. parseInt()  
B. parseFloat()  
C. toString()  
D. toInt()

**12. What is the output of the following code?**

let x = true;

console.log(typeof x);

A. boolean  
B. true  
C. string  
D. object

**13. Which of the following keywords is used to declare a block-scoped variable?**

A. var  
B. let  
C. const  
D. Both B and C

**14. What is the result of the following code?**

let x = 10 / 2;

console.log(x);

A. 5  
B. 2  
C. 0.5  
D. undefined

**15. How do you create an array in JavaScript?**

A. let arr = [1, 2, 3];  
B. let arr = {1, 2, 3};  
C. let arr = (1, 2, 3);  
D. let arr = <1, 2, 3>;

**10 . String Operator - Sequence of character and its immutable**

* Concatenation
* Length
* Access Element
* String Extract
* Replace String
* Split String
* toUppercase, toLowerCase
* stringincludes
* trim
* string repeat
* ‘ , ‘’ concept

**IMP**

**11.** Double quotation as comments

var mystr = "I am an \"RAJ\"";

console.log(mystr);

I am an "RAJ"

**12.** **Array**

In Js , we can Create an array by using two methods -literal notation and

Constructors.

Arrays are mutable. You can change the elements.

**let array = [1, 2, 3];**

**array[1] = 25;**

**console.log(array); // prints [1, 25, 3]**

* **Array Operations :-**

Add, remove, access, iterate, transform, find, combine, slicing, multi-dimensional, Destructing

1. **Adding Element – push and unshift**

Push element add element in the end. Whereas, unshift adds the element at the beginning.

// Literal notation

let arr1 = ["first","Second", "Third"];

// Constructor notation

let arr2 = new Array("1","2","3");

console.log(arr1);

console.log(arr2);

// Adding element

arr1.push("Four");

console.log("After Pushing ",arr1);

arr2.unshift("0");

console.log("After unshifting",arr2);

1. **Removing – pop and shift**

Pop delete the element from last. Whereas, shift remove the element from the beginning.

// Literal notation

let arr1 = ["first","Second", "Third"];

// Constructor notation

let arr2 = new Array("1","2","3");

// Removing an element

arr1.pop()

console.log("Afetr poping",arr1);

arr2.shift()

console.log("After shifting",arr2);

**13.** **let Keyword (IMP Concept)**

When value is assigned with let keyword, you can change it later.

Example.

**let programmer = "Naomi";**

**programmer = "CamperChan";**

console.log(programmer);

output =>

CamperChan

**14. Convetion**

Convention is the method in JS to way the capitalize your variable so that you can declared more than one variable.

**Example :-**

**let variableOne;**

**let secondVariable;**

**let yetAnotherVariable;**

**let thisIsAnAbsurdlyLongName;**

**15. Loop :-**

* **Basic For loop**

**Syntax :-**

**For (Iterator; condition; iteration)**

**{**

**Logic**

**}**

* **Basic For….of Loop**

let fruits = ["Banana","Apple","Mango"]

for(let i of fruits)

{

console.log(i)

}

[Running] node "/Users/rajjani/Documents/GitHub/summer\_work\_2024/Java\_Script/Loops/second\_for\_of.js"

Banana

Apple

Mango

**Difference between For..ofLoop and For in Loop**

let fruits = ["Banana","Apple","Mango"]

for(let i of fruits)

{

console.log(i);

}

let fruit = ["Banana","Apple","Mango"]

for(let j in fruit)

{

console.log(j);

}

[Running] node "/Users/rajjani/Documents/GitHub/summer\_work\_2024/Java\_Script/Loops/second\_for\_of.js"

Banana

Apple

Mango

0

1

2