**LETS UPGARDE JAVASCRIPT ESSENTIALS**

**ASSIGNMENT**

**DAY 1**

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**Question 1 : Explore and explain the various methods in console function Explain them Ex. console.log() console.warn(). etc...**

In javascript, the console is an object which provides access to the browser debugging console.

The console object provides us with several different methods, like :

* log()
* error()
* warn()
* clear()
* time() and timeEnd()
* table()
* count()
* group() and groupEnd()
* custom console logs

**1.Console.log()**

Mainly used to log(print) the output to the console. We can put any type inside the log(), be it a string, array, object, boolean etc.

2. **console.error()**

Used to log error message to the console. Useful in testing of code. By default the error message will be highlighted with red color.

**3.console.warn()**

Used to log warning message to the console. By default the warning message will be highlighted with yellow color.

4. **console.clear()**

Used to clear the console. The console will be cleared, in case of Chrome a simple overlayed text will be printed like : ‘Console was cleared’ while in firefox no message is returned.

5. **console.time() and console.timeEnd()**

Whenever we want to know the amount of time spend by a block or a function, we can make use of the time() and timeEnd() methods provided by the javascript console object. They take a label which must be same, and the code inside can be anything( function, object, simple console).

**Question 2 : Write the difference between var, let and const with code examples. Question**

**Var**

The JavaScript variables statement is used to declare a variable and, optionally, we can initialize the value of that variable.

**Code:**

function nodeSimplified(){

var a =10;

console.log(a); // output 10

if(true){

var a=20;

console.log(a); // output 20

}

console.log(a); // output 20

}

**let**

The **let** statement declares a local variable in a block scope. It is similar to **var**,inthat we can optionally initialize the variable.

**Code:**

**Let a=10**

function nodeSimplified(){

let a =10;

console.log(a); // output 10

if(true){

let a=20;

console.log(a); // output 20

}

console.log(a); // output 10

}

**const**

const statement values can be assigned once and they cannot be reassigned. The scope of const statement works similar to let statements.

function nodeSimplified(){

const MY\_VARIABLE =10;

console.log(MY\_VARIABLE); //output 10

}

**3 : Write a brief intro on available data types in Javascript.**

A value in JavaScript is always of a certain type. For example, a string or a number.

There are 8 basic data types in JavaScript.

* number for numbers of any kind: integer or floating-point, integers are limited by ±253.
* bigint is for integer numbers of arbitrary length.
* string for strings. A string may have zero or more characters, there’s no separate single-character type.
* boolean for true/false.
* null for unknown values – a standalone type that has a single value null.
* undefined for unassigned values – a standalone type that has a single value undefined.
* object for more complex data structures.
* symbol for unique identifiers.

The typeof operator allows us to see which type is stored in a variable.

* Two forms: typeof x or typeof(x).
* Returns a string with the name of the type, like "string".
* For null returns "object" – this is an error in the language, it’s not actually an object.