

1. Lexical Structure of any programming language is the standard set of rules that we follow in order to write good code that does not give errors and also is more readable.

Example :-

- The comments must be written in a specific form only by enclosing the **double line comment by /\* and then closing it by \*/**
- The variables must be written in a way keeping in mind that our language is **case sensitive** or not. In case it is case sensitive, then the character case of our identifiers must also be taken into account
- Our lexical structure also determines whether we must **specify the dataType of our variable** or not. In languages like Java and C++, the mentioning of the dataType of our variable is vital unlike that of JavaScript / Python.

2. Unicode is the unique code that is mapped to each of our character that we use in programming. Every single character is '\', '+', '-', alphabets etc have a unique code mapped to them.

So in Case, a particular character is not present in our keyBoard, we may use the uniCode character

of that specific character instead to access it in our program since that particular uniCode is valid all across the globe which is mapped to a single character only.

Example :- If we have to write a particular alphabet that is present in German but not in the English Alphabetical System, we may use the unicode character of that particular alphabet in our program

3. The main keyWords present in JavaScript are

- function: It is used when we are defining any method in our program
- return : It is the keyword used when a method returns some value to the function that called it
- if/ else : These are the keywords used to signify conditional statements
- while/ for : These are the keywords used to signify the presence of a while loop / for loop
- true/false : These are keyWords stating boolean correct and boolean false

Example :

A screenshot of a code editor interface with a dark theme. The top menu bar includes 'File', 'Edit', 'Selection', 'View', 'Go', 'Run', 'Terminal', and 'Help'. Below the menu, there are four tabs: 'falsy.js', 'func.js', 'reverseOfNumber.js', and 'task.js'. The 'task.js' tab is active, showing a JavaScript function 'getFactorial' and its usage. The code is as follows:

```
1 function getFactorial( number )
2 {
3     if( number == 0 )
4         return 1;
5
6     result = number * getFactorial( number - 1 ) ;
7
8     return result ;
9 }
10
11
12 answer = getFactorial( 10 );
13 console.log( `Factorial value is ${ answer }` ) ;
```

Here, **function, return, console** etc are keyWords that have their own unique meanings

4. ShortHand operators are the operators that are used to write a particular statement/instruction but keeping the size of the code small and precise So that code is more readAble and easily debuGgable

The main shorthand operators are

i) += : If we want to say  $a = a + 10$ , we can just write  $a += 10$

ii) -= : If we want to say  $a = a - 10$ , we can just write  $a -= 10$

iii) \*= : If we want to say  $a = a * 10$ , we can just write  $a *= 10$

iv) /= : If we want to say  $a = a / 10$ , we can just write  $a /= 10$

v) %= : If we want to say  $a = a \% 10$ , we can just write  $a \% = 10$

vi) ? operator : if we want to write

```
if( number > 0 )
    abs_value = number ;
else
    Abs_value = - number ;
```

We would cut it short by stating

```
answer = (number > 0 ) ? : number :-number ;
```

5. Use Strict in javaScript is a property where we would be allowed to only use the variables/objects that are declared . We will not be able to assign any variable / object some value if it is not declared.