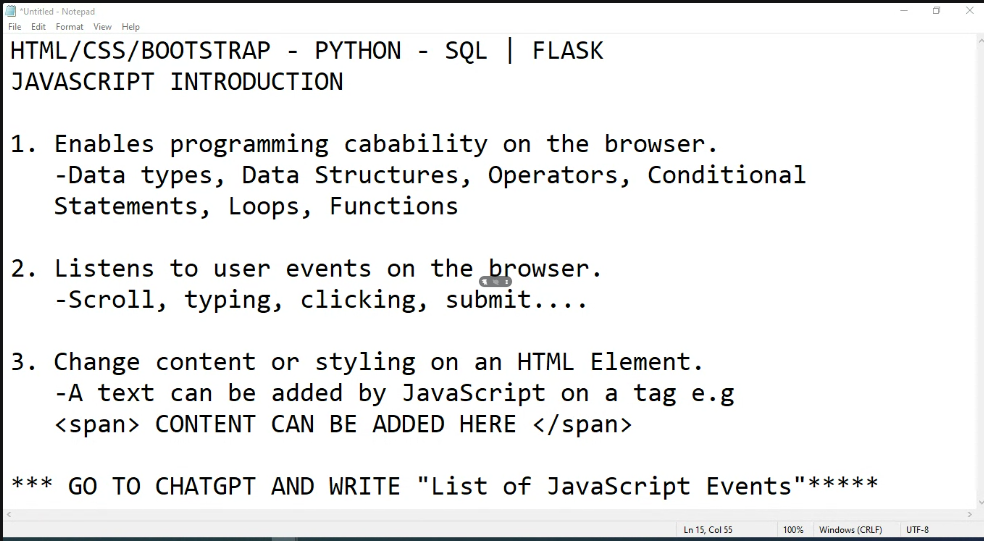
**Html/css/bootstrap –Python – sql | flask**

**Javascript introduction**



UI- User Interface (HTML/CSS)

UX- User Experience (JavaScript)

FrontEnd Developer – HTML/CSS/JAVASCRIPT – Vanilla JavaScript (raw javascript)

**Using javascript**

1. Javascript is written at the bottom always.

Defining a variable

// console.log is print

        console.log('Hello world');

        // creating a variable

        let num1 = 2;

        let num2 = 5;

        let sum =num1 + num2;

        console.log(sum)

1.introduces programming on the browser.

Data types-strings \*\*methods\*\*\*\*

,numbers(ints,floats) \*\*\*arithmentic operations\*\*

, Booleans \*\*\* conditional operator\*\*\*logical operators\*\*

-Data structures –array(list) \*\*methods\*\*

- object (exactly like a dictionary)

--Operators –arithmetic - +, -

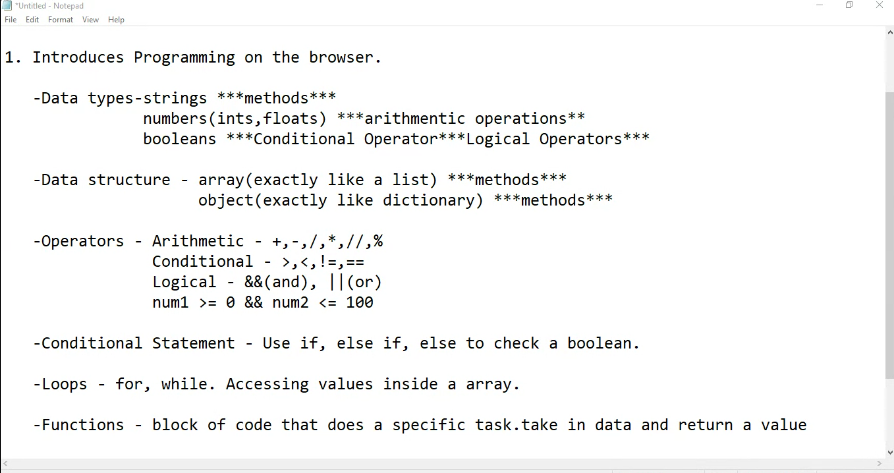
-conditional

-logical – and(&&), or (||) eg num1 >= 0 && num2 <= 100

-conditional statement – use if, else if, else to check a Boolean.

- loops – for for,while,. Accessing values inside an array.

- functions –block of code that does a specific task,take in some data and return a value.



**JS ARRAYS**

* An array is a special variable/data structure used to hold more than one value at a point – equivalent to a list in python.
* Properties
  1. They’re ordered – elements can be accessed with index.
  2. Mutable – can change / alter
  3. Can store multiple items of different data types

Syntax – let array\_name = [ values ]

There is one dimensional and multidimentional arrays

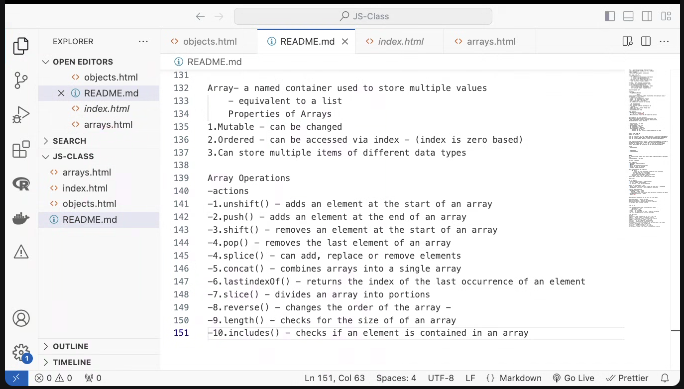
**Array operations**

Can range from creating arrays, updating values, adding and removing values

Task –slide 53, 69, 70

Use splice to add and replace elements

Use sort



**Objects**

Are data structures used to store values/key-value pairs. Equivalent to a dictionary in python

Key-value 🡪 property

1. No spaces
2. Can contain letters,digit, underscores and $
3. Can only start with\_ or letter or $

Xtics of objects

1. Store data in key value pairs.
2. Mutable
3. Object keys are essentially strings.
4. Values can be of any data type.
5. They have methods/operations.

Why use objects?

1. Can group related in a single container
2. Store complex structured data
3. To represent /model real world entities

Objects can be created in 2 ways:

1. Object literal syntax – directly creates key value pairs
2. Using object construct – built-in oject()

Accessing object properties

1. Using dot notation.
2. Using bracket notation.