8 days:

**Day 4**

**Sorting and Searching Algorithms**

**Sorting:** Sorting is a process of arranging element or data of in type in acceding or descending order.

In JavaScript Array refence or linear reference data type hold present sort() method which help to do sorting using asci or Unicode code.

First we will see pre defined sort method present in Array with number or string or object type sort.

Then we will see few pre defined sorting technique

Bubble sort

Selection sort

Insertion sort

Heap sort

Merge sort

Timsort etc

Sort pre defined method by default sort one 1 digit number.

If we want to sort for more than 1 digit number then we need to pass callback function inside sort method.

num1.sort((a,b)=>a-b)

if result <0 🡪 a comes before b

if result >0🡪 b comes before a

if result ==0 🡪 a and b unchanged.

Using sort method

1. Number sort
2. String sort
3. Object sort with property

If we want to use sorting algorithms

1. Time complexity
2. Extra space
3. Data set
4. Bubble sort: this sort repeatedly compares adjacent element and swap if they are in wrong position. It bubbles the largest/smallest value to the top base upon order of the sort which we want to achieve.