**Data Strucutres:**

**Big 0:**

It is frame work that is used to measure time and space complexity

Time complexity:

Number of operations + assignements

Linear: o(n)

Constant : o(1)

Quadratic : o(n2)

Space Complexity:

Number of variables / space

Dictionary,arrays,list, : o(n)

O(log n) < n

O(n logn) < n2

**Binary Search**

Searching Technique

It is used to find the index of a specific element in a given array

The array must be sorted

O(logn) complexity

**Sliding Window**

Time Complexity: o(logN)

Space Complexty: o(i)