DSA

A diagram of data structure

Description automatically generated

Data Structures

1. Array: Contiguous memory

A green rectangular object with white text

Description automatically generated

Complexities for Creation of Arrays:

Time Complexity: O(1)

Auxiliary Space: O(n)

Complexities for Adding elements to the Arrays

Time Complexity: O(1)/O(n) ( O(1) - for inserting elements at the end of the array, O(n) - for inserting elements at the beginning of the array and to the full array

Auxiliary Space: O(1)

Complexities for accessing elements in the Arrays

Time Complexity: O(1)

Auxiliary Space: O(1)

Complexities for Removing elements in the Arrays

Time Complexity: O(1)/O(n) ( O(1) - for removing elements at the end of the array, O(n) - for removing elements at the beginning of the Python create array and to the full array

Auxiliary Space: O(1)