DSA through C++

Dynamic Array data structure

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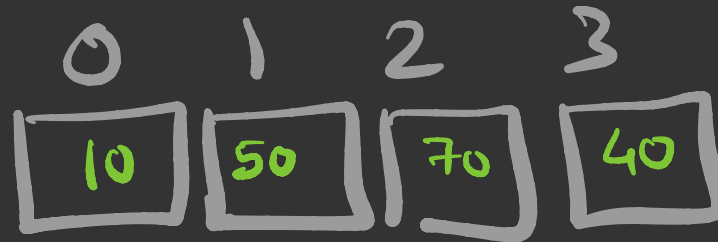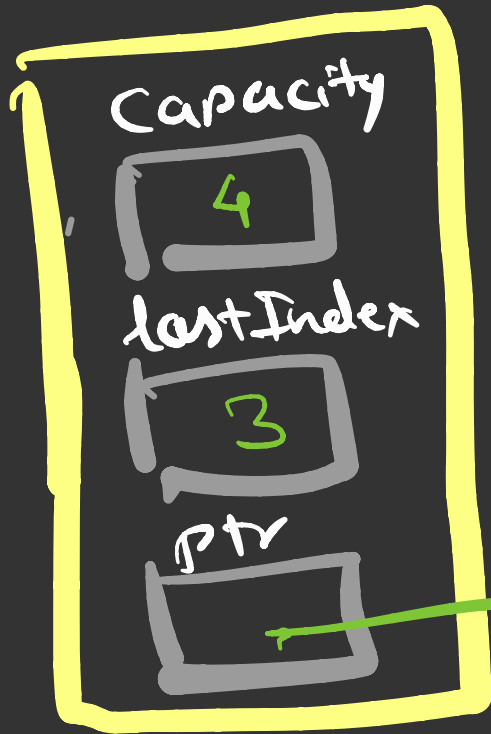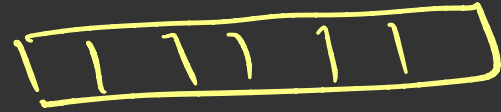# Agenda

1. Introduction to Dynamic Arrays
2. doubleArray ()
3. halfArray()
4. Array vs Dynamic Arrays

Introduction to Dynamic Arrays

Array obj:

fixed size
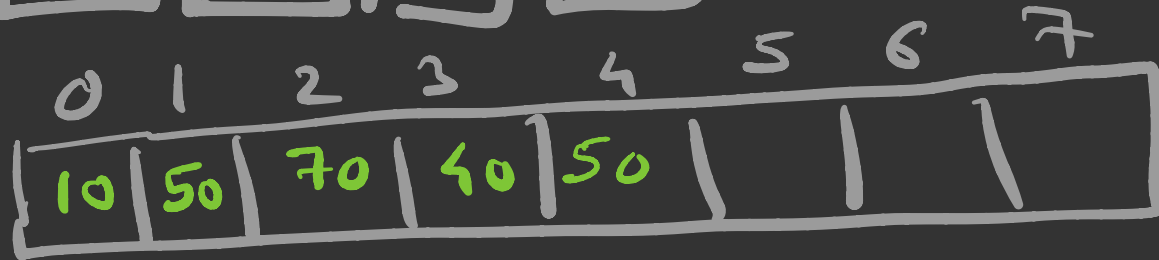
Capacity

4

lastIndex

3

ptr

0	1	2	3
10	50	70	40

temp

0	1	2	3	4	5	6	7
10	50	70	40	50			

When to grow array?

You are trying to insert or append data in an array and array is full.

halfArray()

When to call halfArray?

You are trying to delete a data from the array. After successful deletion, if array is half filled then call halfArray()

Array vs Dynamic Array

Array can't grow or shrink

Dynamic Array can grow or shrink