DSA through C++

Dynamic Array data structure

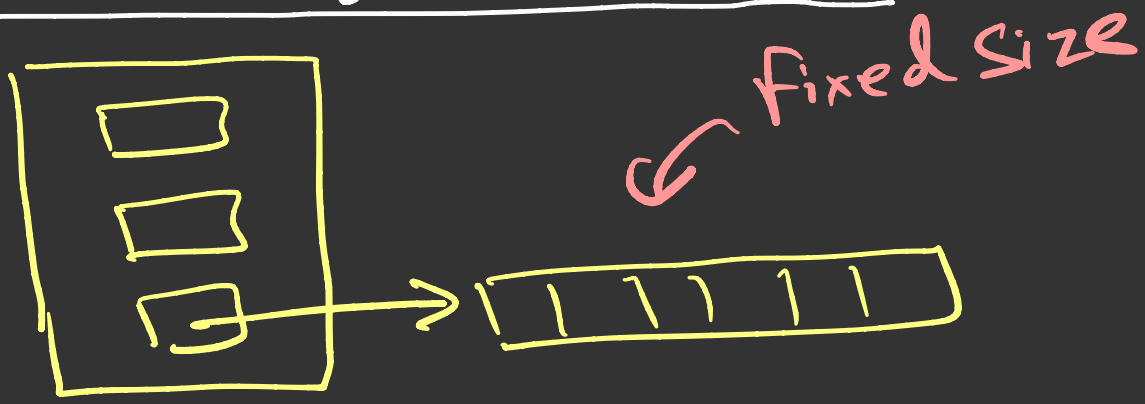
Saurabh Shukla (MySirG)

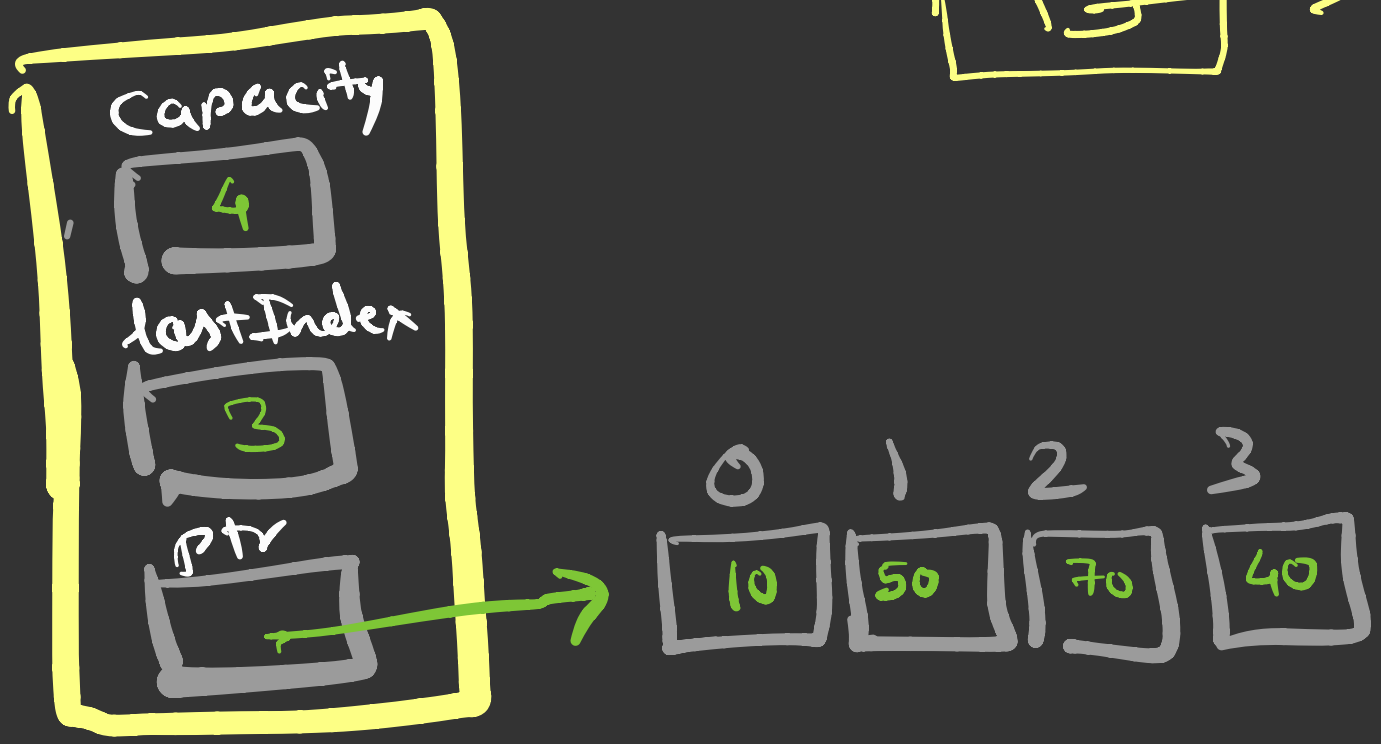
Agenda

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

Introduction to Dynamic Arrays

Array obj :

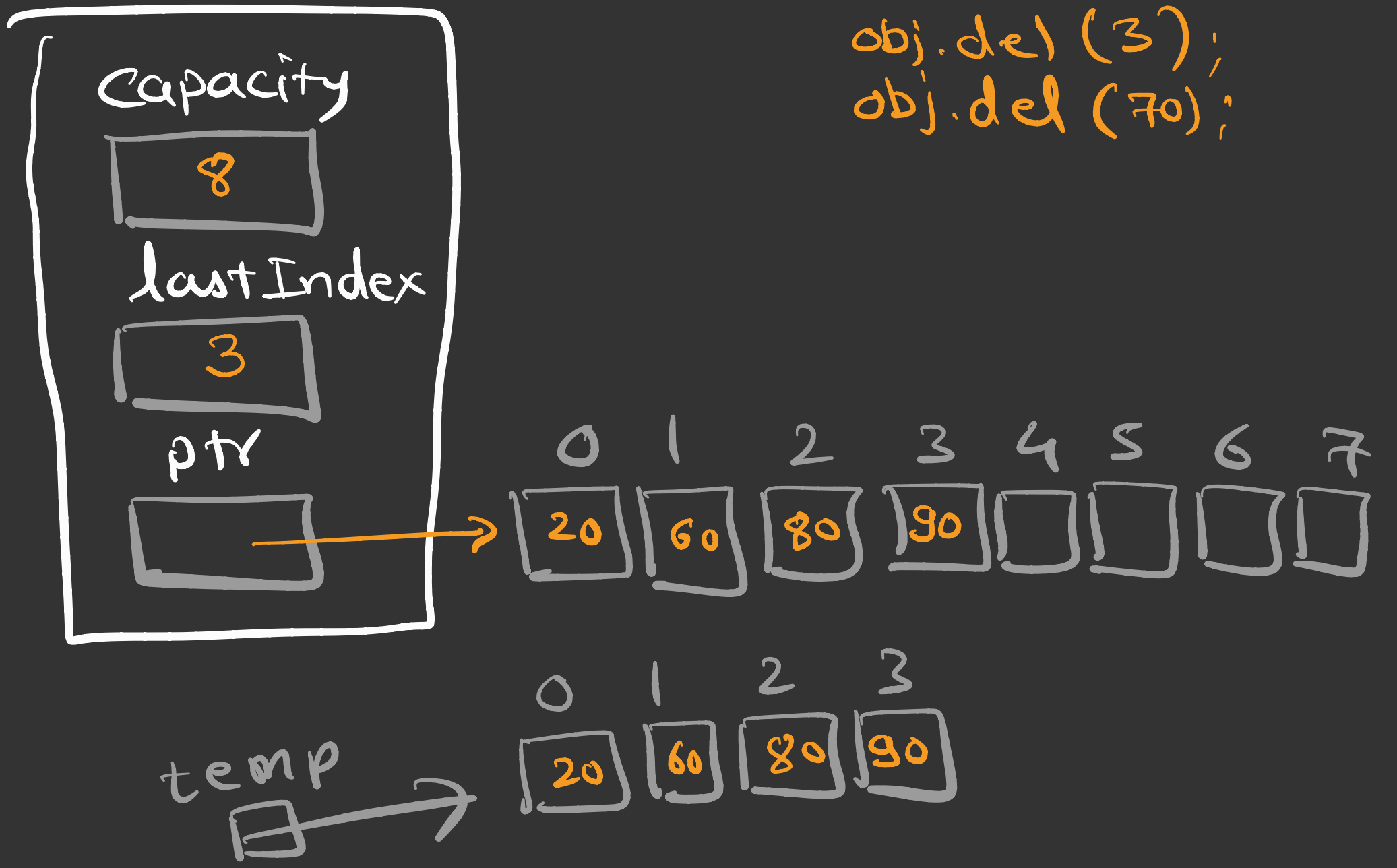




doubleArray()

When to grow array?

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


obj.del(3);
obj.del(70);
capacity
8
lastIndex
3
ptr
0 1 2 3 4 5 6 7
20 60 80 90
temp
0 1 2 3
20 60 80 90

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