Stack
↳ LIFO
↳ **Last In first Out**

Abstract Data Type
⇓

1) Push → insert the elements inside the elements

OR

FILO
↳ first In Last Out

2) Pop → delete the elements from the stack

Push ⟶ top variable

top →

| https://leetcode.com/problems/two-sum/ |
| https://leetcode.com/problemset/all/ |
| https://leetcode.com/explore/ |
| https://leetcode.com/ |
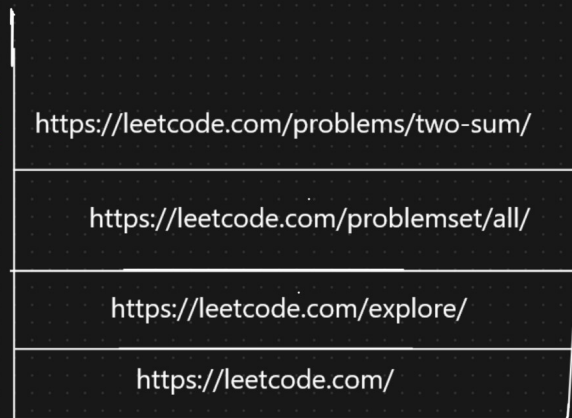
Stack Data Structure

undo → Ctrl+Z (LIFO)

function calling → Recursion

Stack in Python

Arrays (List) $\longrightarrow$ Dynamic array

Linked List

capacity = 20

capacity = 10

| | 0 |
| 1 |
| 2 |
| | |

0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

$2 * 10 = 20 \longrightarrow$

1) copy of data

2) append to 11th element

19
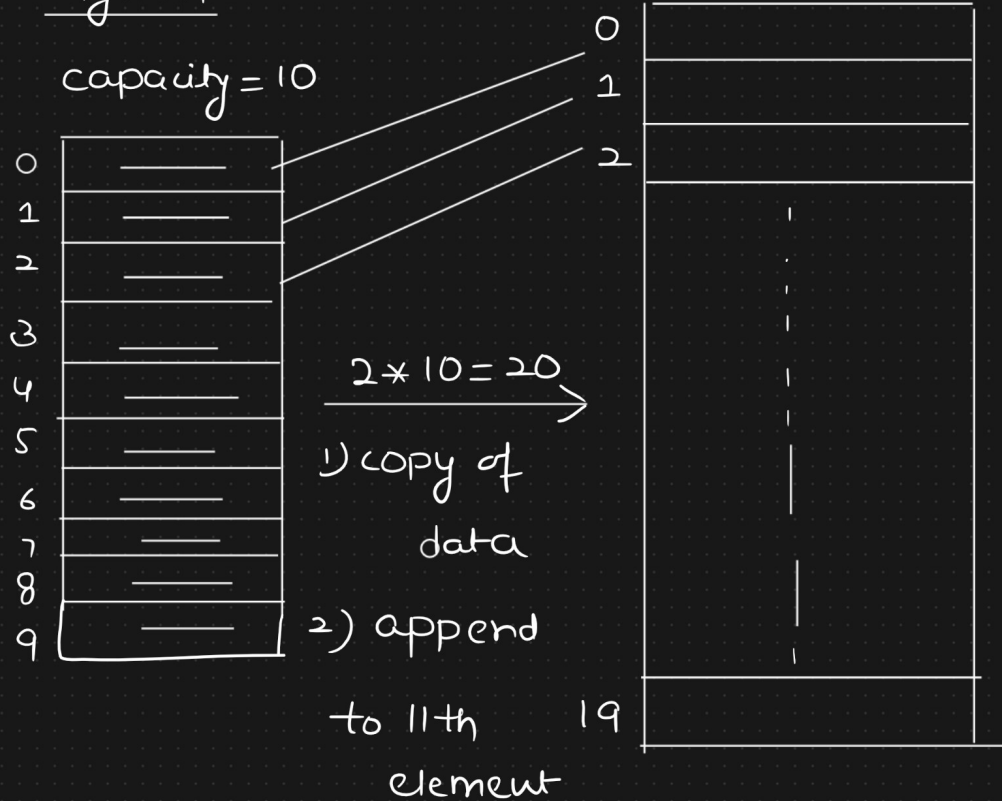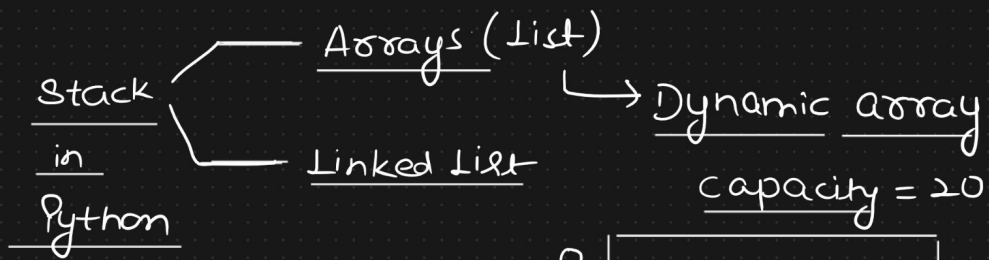
Push $\longrightarrow$ Static array

$O(1)$
↓
Constant time operation

$\Leftarrow$ push(arr, data):

    if top == n :
       ↳ Stack overflow

    else :
       top = top + 1
       arr(top) = data