

3. STACK

Stack is a data structure that store items in last in / first-out manner (LIFO).

Stack operations

- create Stack
- push (insert)
- pop (remove)

- peek
- isEmpty
- isFull

- delete Stack

create Stack ~~push~~

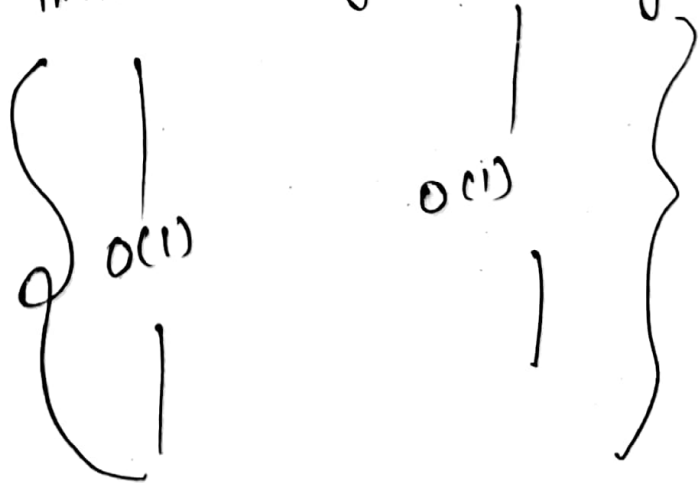
customStack = []

- Stack using Array
- Easy to implement
- Fixed size

- Stack using linked list
- Implementation is not easy
- variable size.

All methods in PC

Time and space complexity of stack using Array



Stack

create Stack

push

pop

peek

isEmpty

delete entire Stack

Stack using linked list

methods for PC

Time and space complexity of stack using linked list

- Same as Array stack.

when to use/Avoid stack

USE:

- LIFO functionality
- The chance of data corruption is minimum

Avoid:

- Random access is not possible
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