

STACK

A **stack** is a linear data structure that follows the **Last In, First Out (LIFO)** principle. This means the last element added to the stack is the first one to be removed. Think of it like a stack of plates – you add to the top and remove from the top.

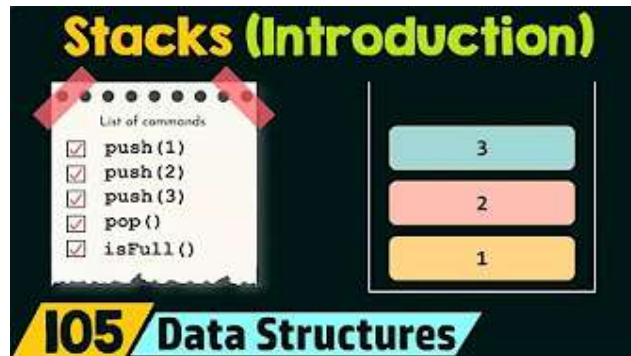
Stacks are commonly used in:

- Function call management (call stack)
- Undo mechanisms in text editors
- Expression evaluation and syntax parsing

Basic operations:

- `push()` – add an element to the top
- `pop()` – remove the top element
- `peek()` – view the top element without removing it
- `isEmpty()` – check if the stack is empty

YouTube Resources:



Stack | Data Structure (Neso Academy)

<https://youtube.com/playlist?list=PLBlnK6fEyqRgWh1emltdMOz8O2m5X3YYn&si=HXk8tQNhsFIQf8sc>



Stacks in 10 minutes (Bro Code)

<https://youtu.be/KInGo4mAjOo?si=pxli1vwbe3sqngm4>