

What is a Stack? → *Pile of Things*



last In First Out

LIFO D.S

In Computers → Function Calls → Memory Stack

UNDO operation is implemented using stack.

Code Parser

```
class {
    void method {
    }
}
```

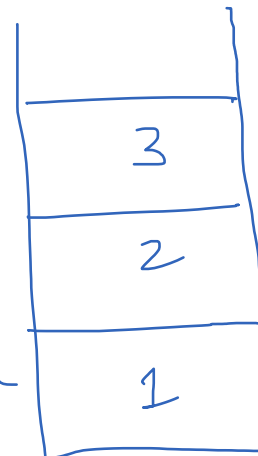
Checking Parenthesis is done using
Stacks.

ADT

Abstract Data Type → List of Operations

Stack ADT

- 1 → Push → Insert
- 2 → Pop → Remove & Print
- 3 → Peek/Top → Viewing the top most data
- 4 → is Empty → True/false

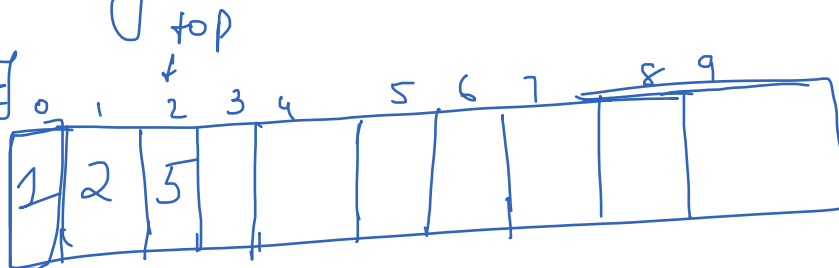


4 → is Empty → True/false



① Array

Array



Size = 10

top = -1 → No element

```
boolean isEmpty()
{
    if (top == -1)
    {
        return true;
    }
    else
    {
        return false;
    }
}
```

top = 3

~~if (do) { top++ → arr[s] }
after top → 4~~

✓ ++top