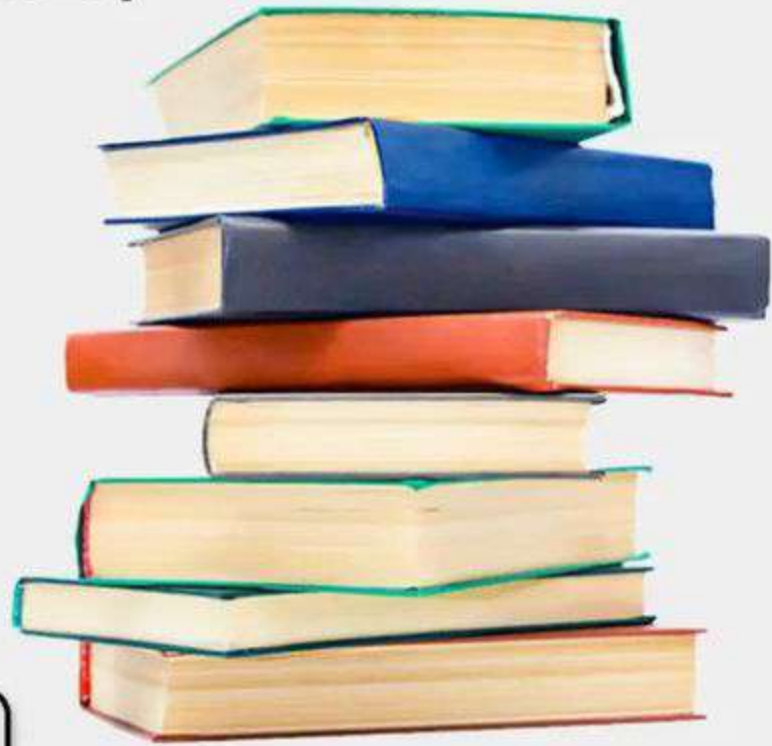# DSA in Real Life

Double Tap

Stack

Stack is used to store the collection of obects. It is based on Last-In-First-Out(LIFO)

Uses of Stack In Real Life

- Undo operation is carried out through stack

- History of visited sites and call logs

- Photos in Gallery

- Youtube download Videos

- Notfications and E-mails

Sorting Algorithm

Algorithm that sorts arrays of data

Uses of Sorting Algorithm In Real Life

- Contact list on the Phone arrange A to Z

- Online shopping to sort price in different range. Example : Amazon and Flipkart

- Arrange words in Dictionary A to Z

- In Photo gallery you can sort images by size and date

Arrays

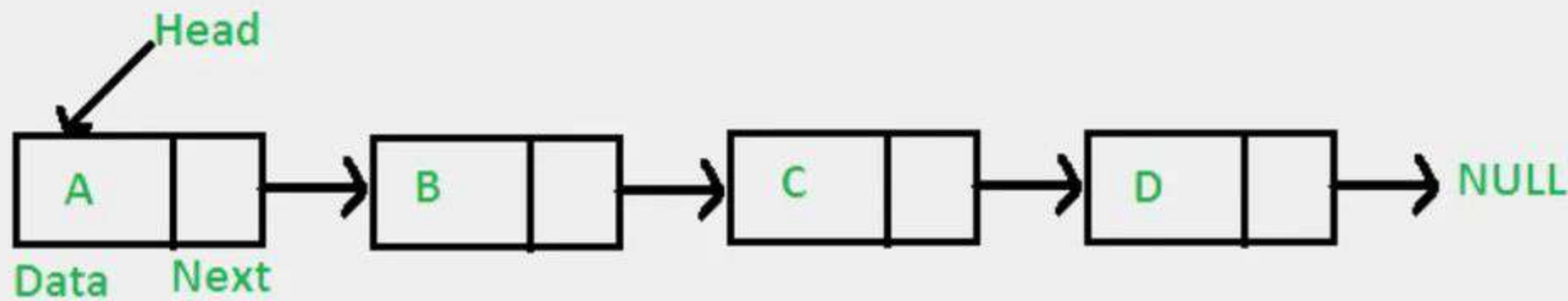**An array is a collection of similar type of elements which have a contiguous memory location**

	0	1	2
0	1	2	3
1	4	5	6

row ↓

Uses of Array In Real Life

- 2D arrays are used in image Processing

- Your Viewing screen is also an multi dimensional arrays of pixels

- Online Movie Ticket booking [seats is arranged by rows and columns]

Linked List

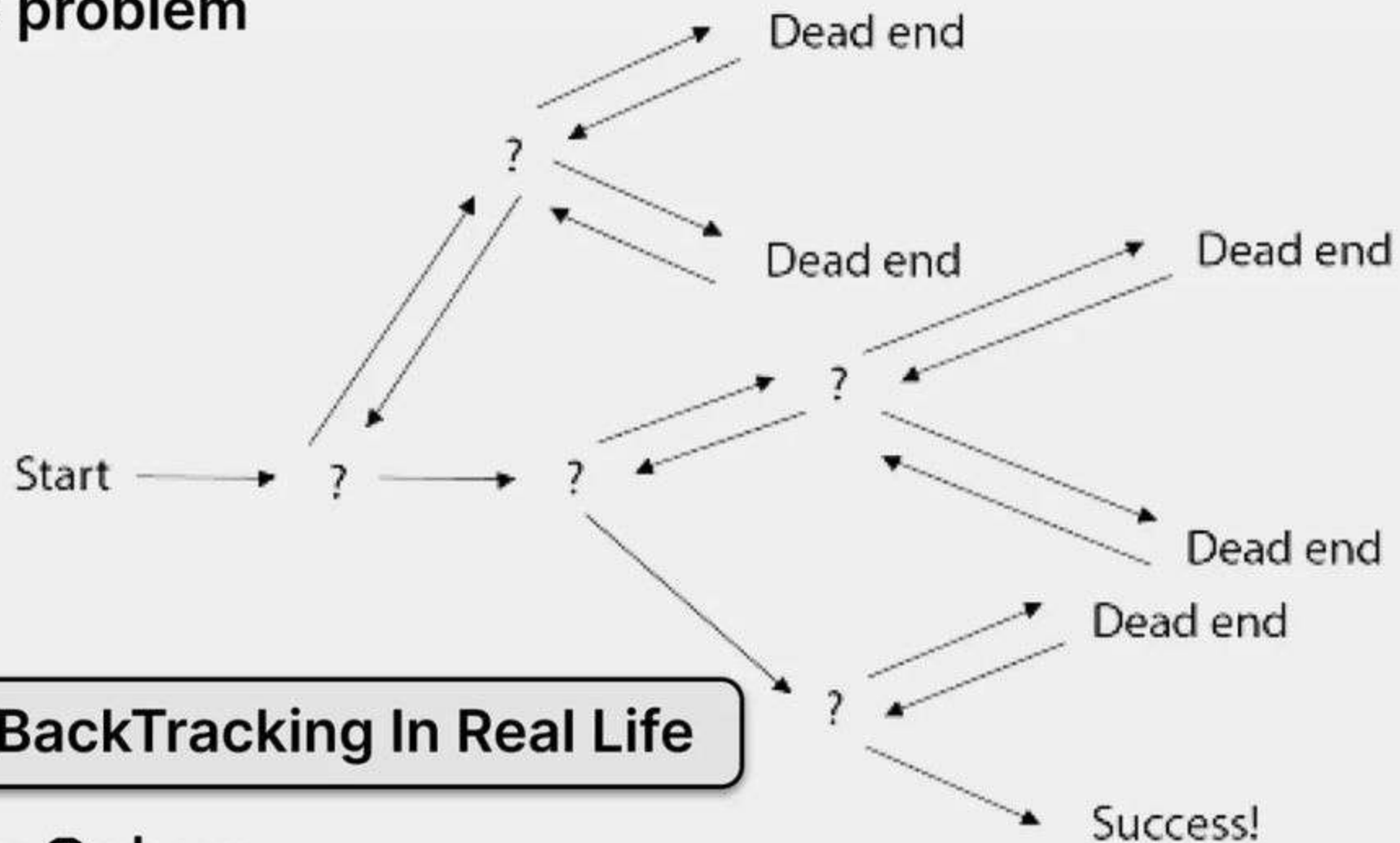**Linked List is a linear data structure which connect element called node**

Uses of Linked List In Real Life

- Web pages can be access thr previous and next URL using the back and forward button

- The music player also use the same technique to switch between songs

- Image viewer software uses a linked list to view the previous and the next image using the previous and next buttons

BackTracking

Backtracking is one of the techniques that can be used to solve the problem

Uses of BackTracking In Real Life

- Sodoku Solver

- To solve problem of the N Queens

- To solve the problem of the Maze

- To solve the love problem of Knight's Tour Problem

- 2048 game