# DS and Algorithm Master Reference

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#### References

Coursera: <https://www.coursera.org/learn/algorithms-part1?action=enroll>

Github: https://github.com/BalajiBaskaran24/DotnetDev/tree/main/DSAndAlgoSample/DSAndAlgoReference

## Commonly used words

Trivial - Less significant or little value

## General Data structure

### Linked list

Nodes linked together

Private class Node

{

object item;

Node Next;

}

### Arrays

## Linear Data Structure

### Stack

LIFO. Operations: Insert(Push), Remove(pop), iterate, test if empty, size. Implemented using array or linked list. Max size should be given during initialization. In case of array.

### Queue

FIFO. Operations: Enqueue, Dequeue

### Priority Queues

While adding the element to collection sorting will be carried out based on comparer provided by user

### Linked List

## Non Linear Data structures

### Hashing

#### Open hashing

##### Chaining

#### Closed Hashing

##### Linear Probing

##### Quadratic Probing

## Algorithms