**What is data :**

* Data are individual facts, statistics or information, often numerical.
* In a more technical sense, data is a set of values of qualitative or quantitative variables about one or more persons or objects, while a datum (singular from data) is a single value of a single variable.
* Although the terms 'data' and 'information' are often used interchangeably, the term has a different meaning.
* In some popular publications, it is sometimes said that data turns into information when viewed in context or in post-analysis,
* Data is measured, collected, reported and analysed and used to create data visualisations such as graphs, tables or figures.
* Data as a general concept refers to reality.

**What is Data Structure :**

* A data structure is a format for organizing, managing, and storing data that allows efficient access and modification
* More specifically, a data structure is a set of data values, the relationships between them, and the functions or operations that can be applied to the data

**Subscriber (LIFO)**

* LIFO stands for last in, first out. It is a method for dealing with data structures where the first element is treated as the last element and the last element is treated as the first.
  + - There is a bucket in which the balls are placed.
  + - Different types of balls are put into the bucket.
  + - The ball that goes into the bucket last will be removed first.
  + - The ball that enters the bucket second to last will be taken out after the ball above it (newer).

**Queue (FIFO)**

* FIFO stands for first in, first out. It is a method of working with data structures where the first element is processed first and the newest element is processed last.
  + There is a checkout where people come in, take their tickets, and leave.
  + People queue up in an organised way to get to the ticket office.
  + The person who enters the line first gets the ticket first and leaves the line.
  + The person who enters the queue next gets a ticket after the person in front of them.
  + In this way, the person who enters the queue last gets the tickets last.
  + Thus, the person who enters the queue first gets the ticket first and the person who enters the queue last gets the ticket last.

**Array(Array)**

* An array is a collection of items stored in adjacent memory locations.
* The purpose is to store multiple items of the same type together.
* The order is arbitrary, the first one that is called by the index goes first.
* The index starts from zero even though there is already one element
* If there are 2 elements in the Array the maximum index of the second element is not 2 but 1.

**Linked List**

* In computer science, a linked list is a linear collection of data elements whose order is not determined by their physical location in memory.
* Instead, each element points to the next
* It is a data structure consisting of a collection of nodes that together represent a sequence.
* In its most basic form, each node contains: data and a reference (in other words, a link) to the next node in the sequence.
* Linked lists are among the simplest and most common data structures.
* They can be used to implement several other common abstract data types, including lists, stacks, queues, associative arrays, and S-expressions, although it is not uncommon to implement these data structures directly without using a linked list as a base.