

CS & IT ENGINEERING



Basics of Computer System

Basics of Data Structures

Lecture No.- 10

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Recap of Previous Lecture



Topic

Operating System

Topic

Types of Operating System



Topics to be Covered



Topic

Data Structure

Topic

Types of Data Structure

Topic

Queue & Stack



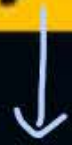


Topic : Data Structure

Model of organizing the data



Topic : Why Data Structure?



Arranging & organizing data in such a way that the program to process data can be finished with lesser time & efforts.



Topic : Data Structure

Types:

1. **Linear:** Elements are arranged in linear (sequential) fashion.

Ex:- Array, Linked-list, Queue, Stack

2. **Non-Linear:** Elements are arranged in non-linear fashion.

Ex:- Tree, Graph, Hash table



Topic : Array



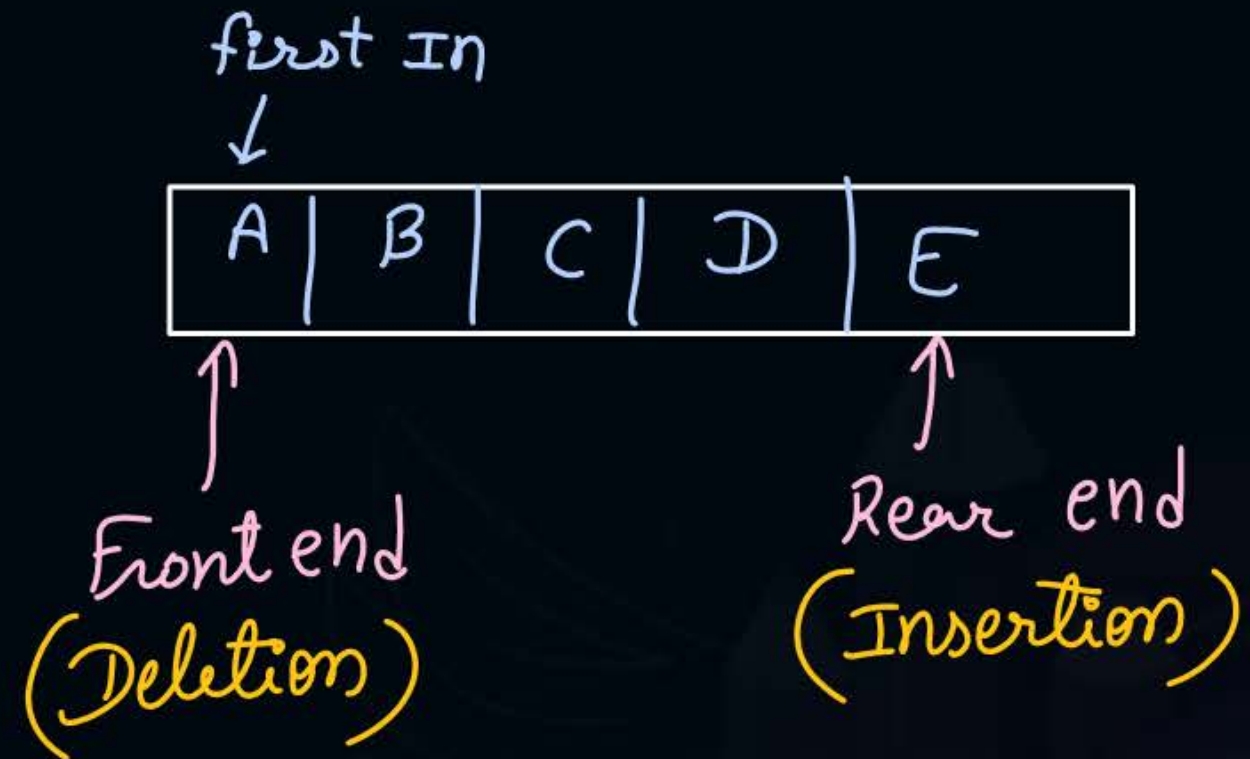
Linear data structure

collection of similar type of elements



Topic : Queue

known as first-in first-out (FIFO) list .

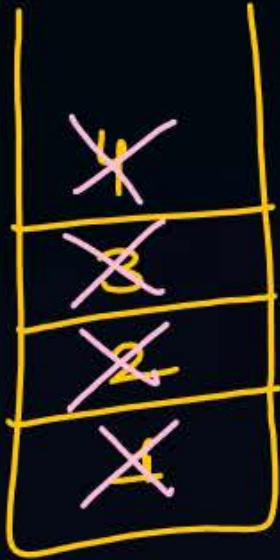




Topic : Stack



Last-In First-Out List



← top element
of stack



2 mins Summary



Topic

Data Structure

Topic

Types of Data Structure

Topic

Queue & Stack

Happy Learning

THANK - YOU

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