Tutorial 01

01. Write down the difference between an array & the structure.

Array	Structure
• Declared using "[]".	Declared using the 'Stouct' keywood.
• The size of an array is fixed.	The size of a stouctureis not fixed.
• Derived data type	User define data type
• Multi dimensional arrays can be formed.	Nested Structures can be formed.
• Array of structures can be formed.	Stouctuee can contain array is its member.
• Elements are stored in contiguous memory location.	Element may not be Stored in a contiguous memory location.

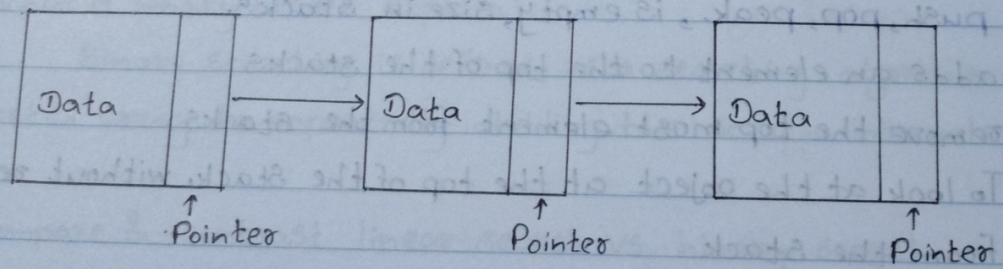
02. Where should you use data structures?

any where data is handle

03. What are the types of data Stouctures?

Array	Tree
Stack	Binary search tree
Queue	Binary tree

04. What is a linked list data Structures?



A linked list is a collection of "nodes" connected via link.

AAC

Subject

05. What is a recursive (පුනරාවර්තන) data structure?

Data structure that is partially composed of smaller or simpler instances of the same data structure.

ex:- Linked-lists

Binary trees

06. Compare and contrast linear data structures vs non-linear data structures.

Linear	Non-linear
• Simpler	Complex
• Single level	Multiple level
• Ineffective	Effective
• Deletion is possible	Deletion is not possible
• Ex: array, stack, linked list	Ex: tree & graph