

Tuesday UNIT-I Overview of concepts Unit 1. Definat" Elementary data organization, Data structures, data structures operations, Photoact data types, algorithms completime-space trade or, preliminaries; Northern trial notation and function, Algorithmic notation, control statement containing for morphesity, of algorithms, asymptotic notations for morphesity, of algorithms, and function, and function, and function, and function, for morphesity, of algorithms, asymptotic notations for morphesity, of algorithms, and arrays, assays Por Representate of lineary arrays, assays Northly, Traversing lineary arrays, assays Truck of detering, Multi-directional array matrice, & space matrices What is data?	
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What is data?	
10.00	
Data can be facts related to	
which house no meaning and but to	
be porcessed.	
,	
Informat ? The processed data is called	
in believed?	
The data is assessed in the state of	
If data is arranged in a system is way	
then it get structure & become meaning for	/
Hohe maning of the state of the	10
The meaningful is pouced data called informa	

Datum! A singular dam of data

Desingle unit of value Giroup Hem: A data item that can be subdivide Sub itor-sub-ikin Flementary ilero I data itero that and be sub divided Entity; no object that has costain Entity Set : Entities with Similar attributes for an entity sel Domain refers to the range What is Data Structure? is a systematic coay data structure to organize data so that it can be used efficiently Ds = Olganizing + Operato Classificat of Data Structure Data Structures Primitive DS Non-Primitive DS +Integer Linear DS 70on-line Character -Tour -Array Booleam Linked list with 500 * float Struck



	7/2
-	Painitive data structure
Basic de	Pains tive data structure
	* It can be directly operated by making
	level instruction
12	level instruction. Binary lang
	States of the st
- 60	14/09/2022/1/2/ 01/10 > 100000000000000000000000000000
	Wednesday
1000	1 Ex: Stock, Array, Linked lists and o
	Operato on Psimitive Data Structure
	* Creation SUDC : When
	* Deletion Destroy
F	* Creation SUDC: MORT * Deletion Destroy = 1 0 * Selection Mathematical Superior of the Supe
	* Updation. Hapradus
	Great?: This operat? creates a data structure
	eg: int a.
	Link.
	Deletion: It is used to destroy the DS in
	C by Gree()"
	(2014)
	Select?: It is for accessing data within a Ds
	Updat?: It is used to change data in Ds. Eg: inti=10;
	Eg: inti=10;
	7/=.50 ; cranil - 40/1
<i>O</i> ·	Non - Primitive data structure
	De can't multiple value coithin a DS
-	* Peless to data type that are deniced
-107	+ Peless to data type that are derived
	It cannot be directly operated by making
	· level instructuo T



3,	linear DS
The	· Data is otyanized in a sequence
data in	. It utablishes the relationship of adjacence
inear Ds	blw the elements, which means all the
UP	elements are stored in monthly linearly of
	sequentially
	· Arrangment of duta pollous a linear tred.
	Mednesdou
	Ex: Stack, Array, Linked lists and greves.
	to Country on Painter Mote Factorise
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	Subsrepts.
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	data 1
	Node. Pointer to the
	" () - ord " next node
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	Non-linear Ds
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+ (1	The data in Non-Linear Do
	If the dat is not arranged in continued
	. The relate other than the adjuments
	relationship.
	Ex = Toice, graph
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Operation on DS
annual grand of
1. Travesing
Inserting and becaused at an unit offile
Deleting broken all spile is
Softing met of
Searching
Merginguland un it tational and
Toravessing: Account each element exactly
only is called traversing
Insuting: Adding the new element to the
existing data structure
Deleting: Deleting an element form a DS
Secreting: Searches a particular element
in the list of element in DS
Sorting: Arranging the element in according
of descenting order.
Merging: (on bining the two different lists
A Same Sata type:
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: (n) ("h") (n):
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iche all all and