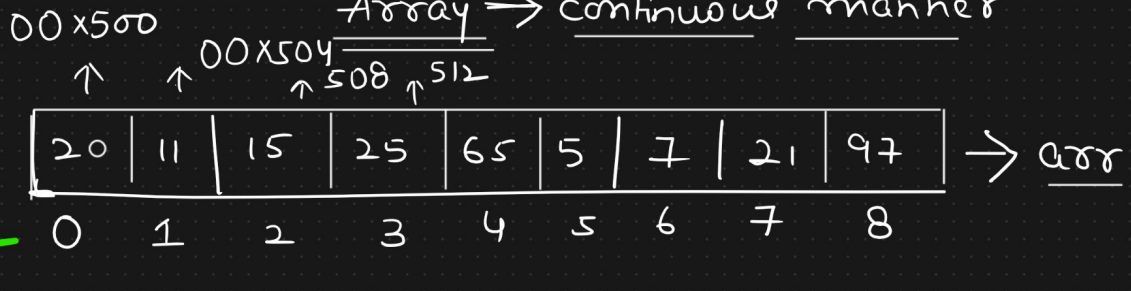
Data Structure

1) Linear DS → Array, Stack, Queue & many more
2) Non-Linear DS → Tree, Graphs

Array → continuous manner



int → 4 Byte

↳ Searching *

Property :-

n = 9

Random access → arr[8]

↳ Print the element present at last position in an array

arr(n-1) →

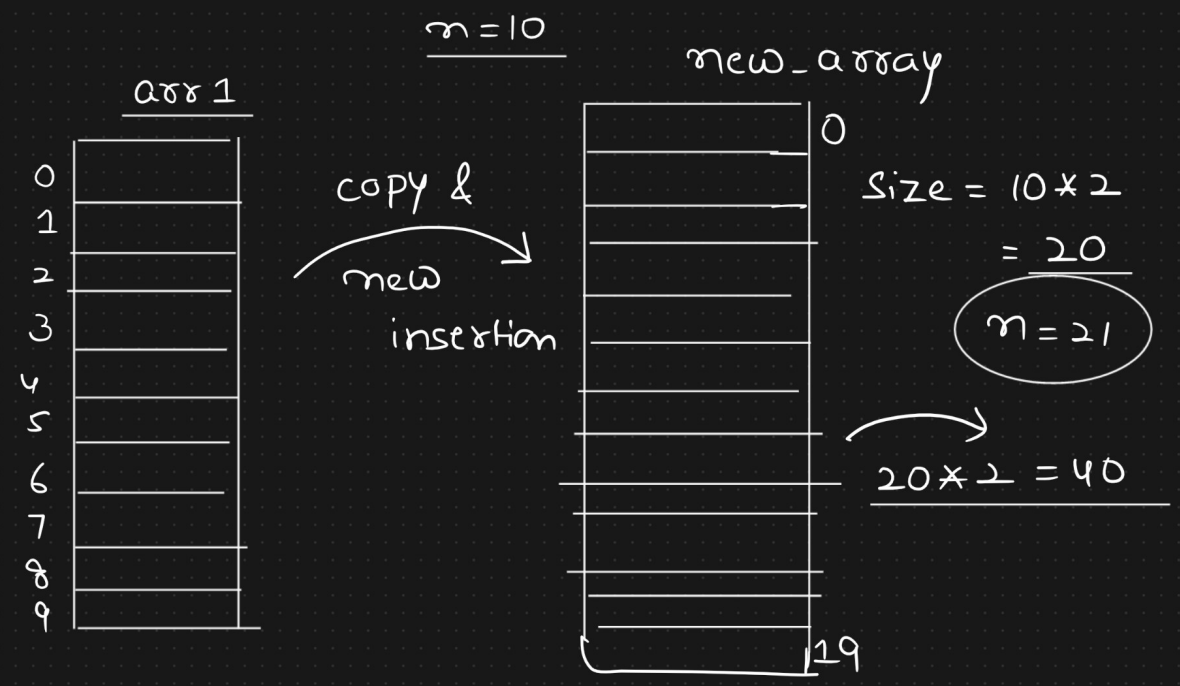
Python → Dynamic array

Array ↔ List → different types

Static array
↳ n = 9
↳ define the size of an array prior

Dynamic array → no need to define the size of an array prior

n = 10 → Exception (C++, Java)



Abstract Data Types

↳ customized

- List DT → insert(), remove(), replace()
- Stack DT → push(), pop(), peek()
- Queue DT
  - ↳ enqueue, dequeue()