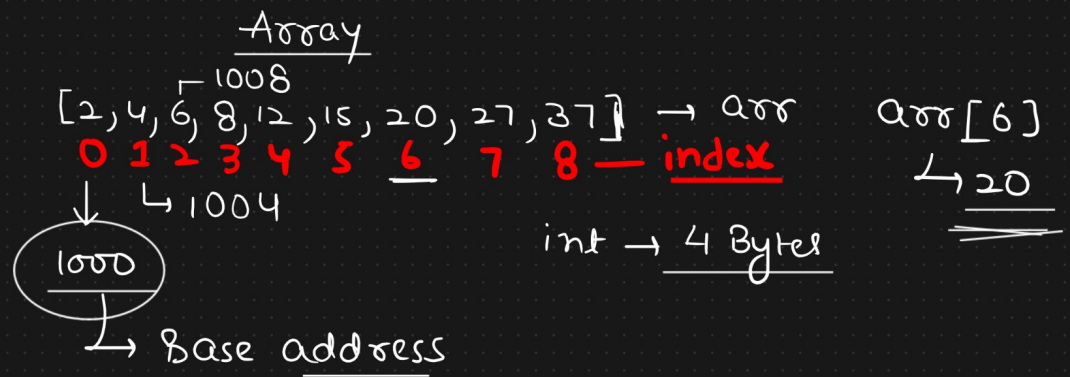


1D Array →



$$\text{arr}[6] \rightarrow 1000 + (6 - 0) \times 4$$

$$1000 + 24 = 1024$$

(contiguous storage of an array elements) (Index)

(By default -0)



Memory address

$$\text{arr}(i) = \text{Base address} + (i - \text{Lower Bound of an index}) \times$$

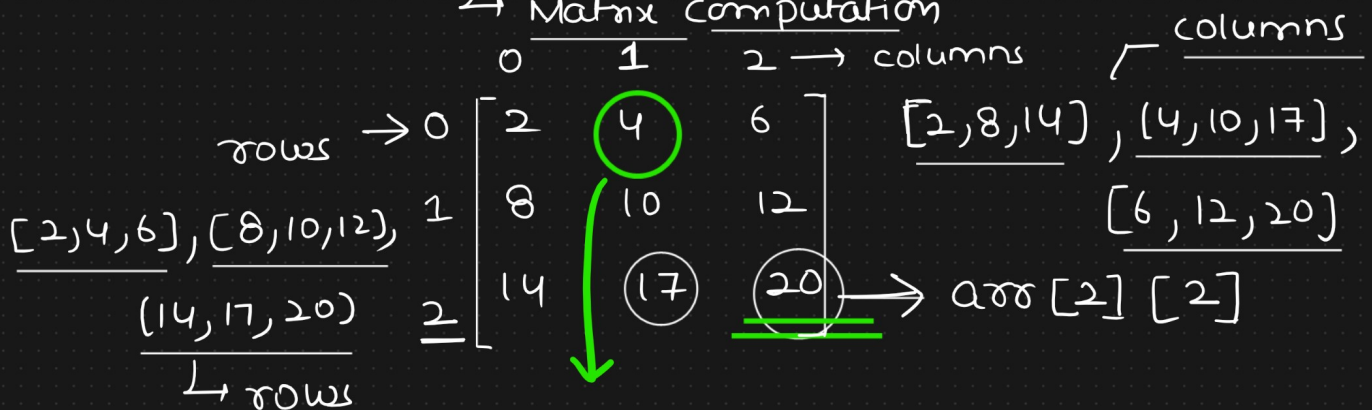
Random access

size of an element

2D Array → Rows, columns

$\begin{cases} i \rightarrow \text{Row index} \\ j \rightarrow \text{Column index} \end{cases}$

→ Matrix computation



arr[0][1]

1000

0	1	2	3	4	5	6	7	8
2	4	6	8	10	12	14	16	18

2 8 14 4 10 17 6 12 20 → CMF

→ Row major form

1) Row major form \rightarrow Row-wise

2) column major form \rightarrow column-wise