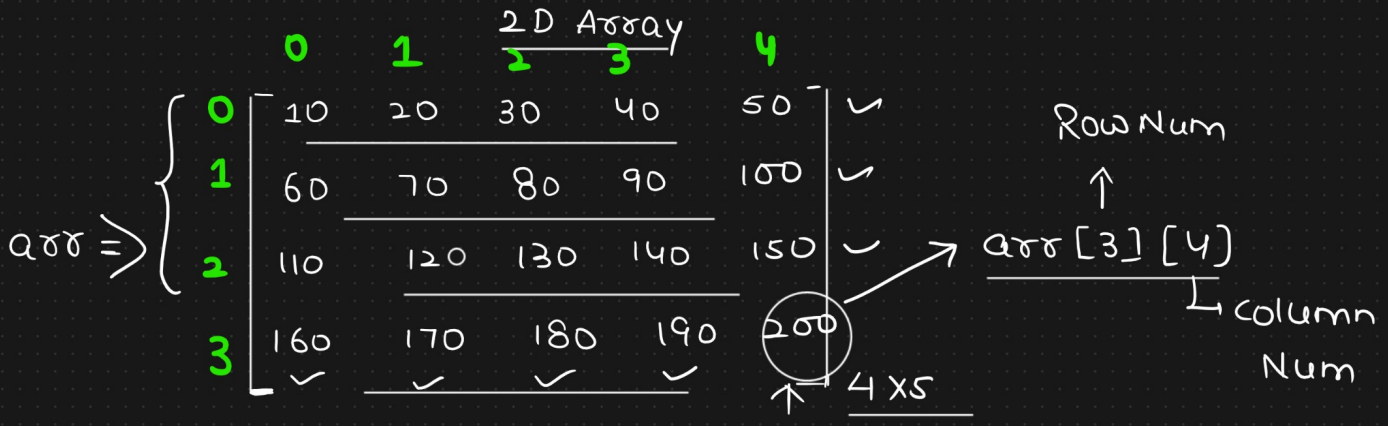

arr[0][0] → Base address → 1000

Row major form

nr = 4
nc = 5

Elements need to Skip

Loc(arr[3][4]) => 1000 + [(3 - 0) * 5 + (4 - 0)] * 2

=> 1000 + (15 + 4) * 2

=> 1000 + 38

=> 1038

In Row major form: For searching 200 we need to skip 3 rows where each row is having 5 elements and in the last row have to skip 4 elements

Row major form

Loc(arr[i][j]) => Base address + [(i - lBr) * nC + (j - lBc)] * size of each element

lower bound of row which is by default=0

no. of columns

lower bound of column which is by default=0

Column major form

Loc(arr[i][j]) => Base address + [(j - lBc) * nR + (i - lBr)] * size of each element

Going forward we are going to discuss different application of an array like searching and sorting algorithm, divide and conquer approach.