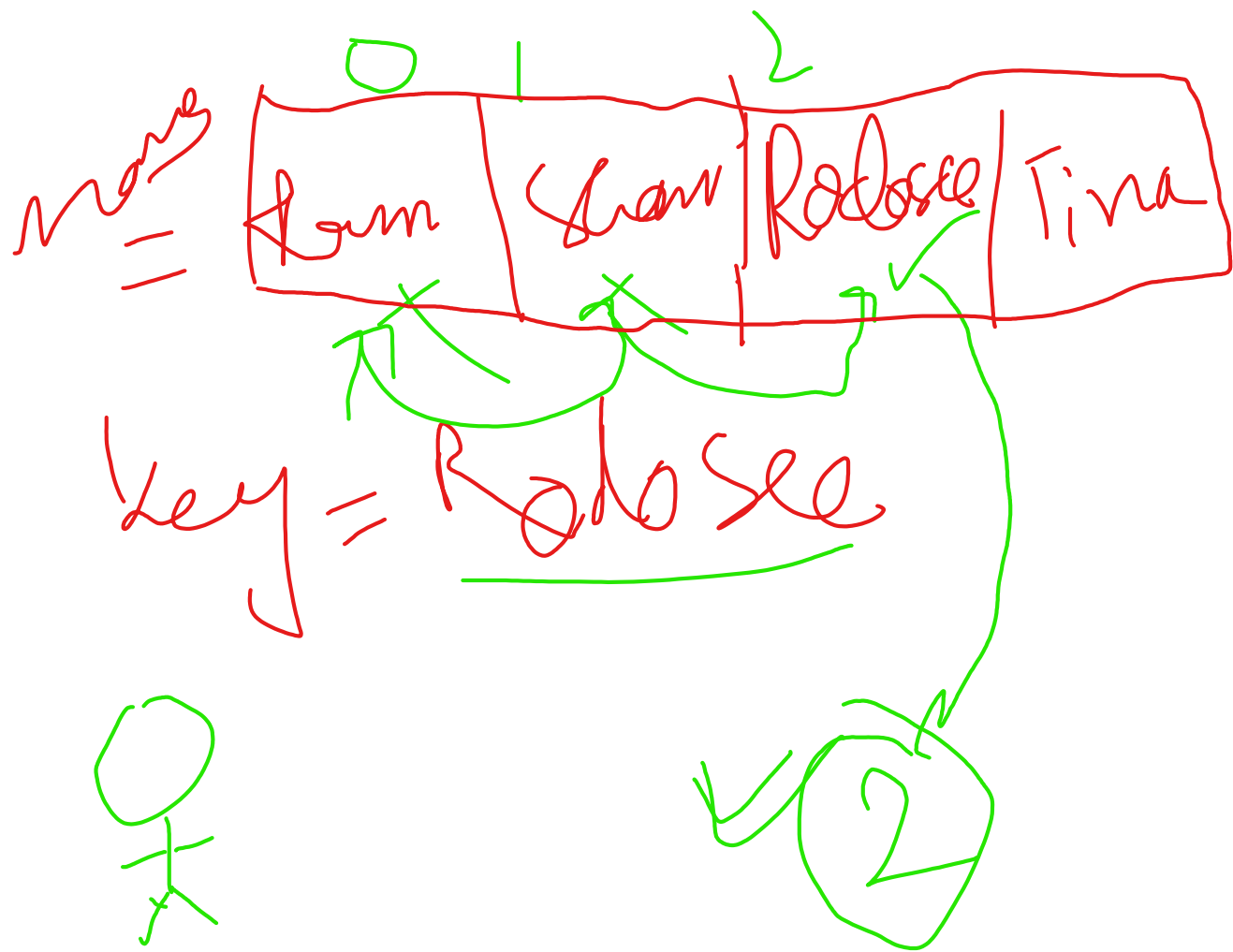


Searching

→ Key



Linear Search

Binary Search

{2,5,8,12,16,23,38,56,72,91}

key = ?

The array is always Sorted in increasing order

Steps:

1. mid element

$$\text{mid} = \frac{\text{low} + \text{high}}{2}$$

$$= \frac{0 + 9}{2} = 4.5$$

2. key compare with

i) $key = arr[mid]$
result \rightarrow return mid;

ii) $key > arr[mid]$
go to right
 $low = mid + 1;$

iii) $key < arr[mid]$
go to left

$high = mid - 1;$