Binary Search

20 October 2023 19:02

[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
11	22	33	44	55	66	77	88	99

left — LSA — mid — RSA — Right

1. Key = 22.
2. L = 0
   R = 8
   m = (L+R)/2
   mid = 4
3. Compare key with mid Element
   22 == 55.
4. check if key is smaller or greater to mid element

   key is smaller, consider left sub array.

   Left sub array is from left to mid-1

   Right sub array is from mid+1 to Right index

[0]	[1]	[2]	[3]
11	22	33	44

left mid Right

L = 0
R = mid-1
M = 1

3. key == arr[mid];
   22 == 22.
   key found at index 1.