

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

left mid Right

- 1) key = 99.
- 2) Left = 0  
Right = 8  
mid = 4.
- 3) If (99 == 55)  
no,  
go to step 4.
- 4) As 99 is greater  
we will search in RSA.

RSA.  
 ② L = 5  
R = 8  
m = 6.

- ③ If (key == arr[mid])  
(99 == 77) no.
- ④ As 99 is greater, continue in RSA.

RSA  
 ② left = 7  
Right = 8  
mid = 7.

- ③ If (99 == 88)  
no.

④ Continue in RSA.

RSA.  
 ② left = m+1 = 7+1 = 8.  
Right = 8.  
mid = 8.  
  
 ③ If (99 == arr[mid])  
 $\frac{99 == 99}{\text{Key found at index 8}}$  Yes.