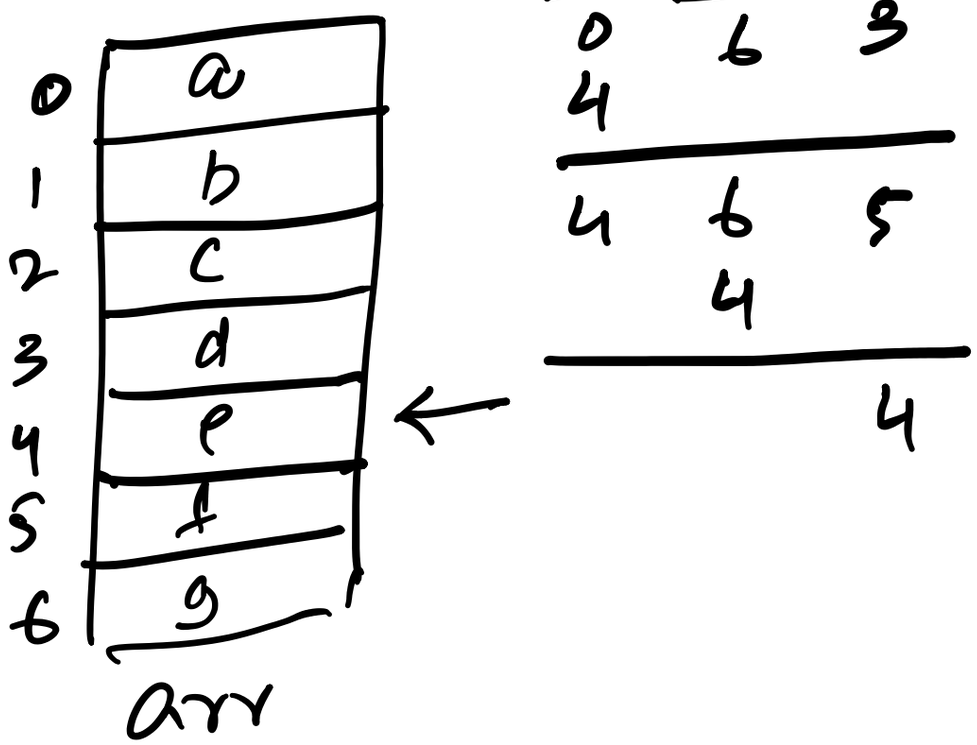
Binary Search

Monday, 23 November 2020 3:20 PM

MID = (6 + 0) DIV 2

data = "e"



LB	UB	mid
0	6	3
4		
4	6	5
	4	
4		

len(arr) = 7

LB = 0

UB = 6

Algorithm

1. Find the mid.
   MID ← (UB + LB) DIV 2
   MID ← INT((UB + LB) ÷ 2)
2. Check if req. data is at the mid
3. IF mid = data
   Then return mid;
   End function.
4. IF data > mid
   Then update LB
   LB ← mid + 1
5. IF data < mid
   Then update UB
   UB ← mid - 1
6. IF LB > UB
   Then return -1;
   End Function.
7. Goto Step 1.

Pre-Requisites:

- Data in array has to be in ascending Order.