

Week 7 DAY -4 | Searching Problems | CC

Total Questions : 3

Total Marks:

Question 1 :

Given a sorted array with Duplicates . Write a program to find LOWER BOUND of a TARGET using Binary search Method .

Return Index corresponding the element of lower bound element.

Example :

Input : - arr = [1,1,1,2,2,3,3,5,5,5,7,7] , Target = 4

Output : - 6

def Lower_Bound(arr , target):

#write code here

Questions:2

Given a sorted array with Duplicates . Write a program to find UPPER BOUND of a TARGET using Binary search Method .

Return Index corresponding to the element of the upper bound element.

Example :

Input : - arr = [1,1,1,2,2,3,3,5,5,5,7,7] , Target = 4

Output : - 7

def Upper_Bound(arr , target):

#write code here

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Questions:3

Given an array with NO Duplicates . Write a program to find PEAK ELEMENT

Return value corresponding to the element of the peak element.

Example :

Input : - arr = [2,5,3,7,9,13,8]

Output : - 5 or 13 (anyone)

HINT : - Peak element is the element which is greater than both neighbours.

def FindPeak(arr):

#write code here

Write Time and Space Complexity of Questions(1-3).