

Binary Search Algorithm

Binary Search (ARRAY, ITEM, MAX, MIN, MID, LOC)

To search/find the location of element present in an array and return it.

ARRAY: Is an array variable containing data.

ITEM: Is variable contains element to be search in ARRAY.

LOC: Is a location variable that will contain the index of element to be search in ARRAY.

MIN: Is a variable that will store lower bound of ARRAY.

MAX: Is a variable that will store upper bound of ARRAY.

MID: Is a variable to store value between MAX and MIN.

BEGIN:

1. LOC = Null

[Start of *WHILE LOOP* structure]

2. while MIN<=MAX

a. MID=(MIN+MAX)/2

[Start of *ELSE IF* structure]

b. If ARRAY[MID]=ITEM, then

i. LOC=MID

ii. Exit

Else if ARRAY[MID]>ITEM, then

i. MAX=MID-1

Else

i. MIN=MID+1

[End of *ELSE IF* structure]

[end of *WHILE LOOP* structure]

3. Return LOC

END