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an array of non-negative integers, design a linear algorithm &
ent it using a program to find whether given key element is
— in the array or not.

thm →

ke the input array from the user.

ike element x you want to search.

set flag = -1

oop : array [start] → array [end]
    · if match found   array [current pos] == x
        print "found"
        flag = 0
        abort

After loop check flag
        if flag == -1
            print "not found"

Stop

1

-1

In an sorted array of +ve integers, design an algo & implement using program to find element present or not.

orithm —›

ske input array, left, right and key(x)
Loop: while (left $\leq$ right)
$$mid = left + (right - left)/2$$
if (arr[mid] == x)
return mid
else if (arr[mid] < x)
left = m+1
else
right = mid -1

END loop

return -1

:-)

in an already sorted array of +ve integers design an algo
mplement it using a program to find whether given key is
int or not.

orithm

Begin

Block size = $\sqrt{size}$

Start = 0

End = block size

while (arr [End] <= key && end < size)

    start = end
    end = end+ block size
    if (end > size -1)
        end = size

done

for (i = start to end-1)
    if (arr [i] == key)
        return i

done

return invalid location

End.

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