Jump search in Java → Count comparisons

Hard 16 minutes Share:

Code Challenge — Write a program

Count how many comparisons you need to do to determine the index of the element, or to determine that this element is not in the array.
You need to use the jump search algorithm described in the theory.

The first line contains the length of an input array, the second one consists of array elements, the last one has the target value.

Sample Input 1:

```
10
0 1 2 3 4 5 6 7 8 9
0
```

Sample Output 1:

```
1
```

Sample Input 2:

```
10
0 1 2 3 4 5 6 7 8 9
3
```

Sample Output 2:

```
2
```

Sample Input 3:

```
10
0 1 2 3 4 5 6 7 8 9
5
```

Sample Output 3:

```
4
```

Sample Input 4:

```
9
0 1 2 3 4 5 7 8 9
6
```

Sample Output 4:

```
4
```

Code Editor IDE

Solve in IDE

✓ **IDE is responding** IntelliJ IDEA 2019.3

✓ **Plugin is responding** 3.2-2019.3-3686

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Time limit: 8 seconds Memory limit: 256 MB

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Share something, Sergey Kubatko

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DM **Dmitrij Morozov** about 2 months ago Report

i got it in 1 hour with crap code and without jump search hahaha =D

0 Reply

G **Gurhan** 3 months ago Report

Failed test #16. Wrong answer
What's wrong with this test case? Shouldn't it give 4?
8
2 4 6 8 10 12 14 16
3

0 Reply

G **Gurhan** 3 months ago Report

Failed test #11. Wrong answer

0 Reply

AN **Adrian Nachev** 4 months ago Report

@usr You need to use the linear search variant and with slightly improved linear search, because you don't always need to compare all numbers from it.

1 Reply

U **usr** 10 months ago Fixed

According to theory we have two algorithms - with linear search and with recursive jump search. The results will be

0 Show all

Code snippets from theory