

1

Task 1

Java 8

Files

solution.java x

2

```
class Solution { public int solution(int[] A); }
```

3

that, given an array A consisting of N integers, returns the biggest value X, which occurs in A exactly X times. If there is no such value, the function should return 0.

Examples:

1. Given A = [3, 8, 2, 3, 3, 2], the function should return 3. The value 2 occurs exactly two times and the value 3 occurs exactly three times, so they both meet the task conditions. The maximum of 2 and 3 is 3.

2. Given A = [7, 1, 2, 8, 2], the function should return 2. The value 1 occurs exactly one time; the value 2 occurs exactly two times.

3. Given A = [3, 1, 4, 1, 5], the function should return 0. There is no value which meets the task conditions.

4. Given A = [5, 5, 5, 5, 5], the function should return 5.

Write an **efficient** algorithm for the following assumptions:

- N is an integer within the range [1..100,000];
- each element of array A is an integer within the range [1..1,000,000,000].

task1

solution.java

test-input.txt

```
1 // you can also use imports, for example:
2 // import java.util.*;
3
4 // you can write to stdout for debugging purposes, e.g.
5 // System.out.println("this is a debug message");
6
7 class Solution {
8     public int solution(int[] A) {
9         // write your code in Java SE 8
10    }
11 }
12
```

Test Output

Run Tests