



Task Grader67

 0.1 sec.  256 MB

(Because of technical problems the task cannot be called grader.)

You are given a number N . A program has been written which returns a sequence a with N elements which satisfies the following conditions:

- there is at least one pair of indices $1 \leq i, j \leq N, i \neq j$ where $a_i \neq a_j$.
- $\sum_{i=1}^N a_i \equiv 0 \pmod{N}$.
- the difference $\max(a_1, a_2, \dots) - \min(a_1, a_2, \dots)$ is minimal.



Implementation details

Your task is to write a grader which checks the correctness of the given solution. It is implemented through the function:

```
std::vector<int> solve(int N);
```

You **must not** implement it! You have to implement the function `main`, which reads N , calls `solve` and checks whether the function returns a correct solution. It is not guaranteed that the returned sequence satisfies all the conditions. The grader must print one number between 0 and 1 - the points for a given test. The points are computed in the following way:

- a satisfied first condition gives 0.15 per test;
- a satisfied second condition gives 0.25 per test;
- a satisfied third condition gives 0.60 per test.



Constraints

- $1 \leq N \leq 10^5 + 67$



Subtasks

Subtask	Points	Constraint
1	15	$1 \leq N \leq \text{about } 6 - 7$
2	20	$1 \leq N \leq 30$
3	25	$1 \leq N \leq 100$
4	20	$1 \leq N \leq 1067$
5	20	$1 \leq N \leq 10^5 + 67$



Example

Jury	Contestant
	<code>solve(5)</code>
2, 1, 3, 2, 3	The grader returns 0.75.

This grader gets full points on the test, because it correctly determines the points that the returned sequence gets.



Sample grader

You are provided with a file `Lgrader.cpp` which acts as a grader of your grader. In order to use the function for the communication, in your code you have to include the library `grader67.h`:

```
#include "grader67.h"
```

The format of the input is the following:

- line 1: the number N .
- line 2: the array a on which your grader will be graded.

After that your grader is executed, which prints the points that this solution gets.