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PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

A. Candies and Two Sisters

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

There are two sisters Alice and Betty. You have n candies. You want to distribute these n candies between two sisters in such a way that:

- Alice will get a (a > 0) candies;
- Betty will get b (b > 0) candies;
- · each sister will get some integer number of candies;
- Alice will get a greater amount of candies than Betty (i.e. a > b);
- all the candies will be given to one of two sisters (i.e. a+b=n).

Your task is to calculate the number of ways to distribute exactly n candies between sisters in a way described above. Candies are indistinguishable.

Formally, find the number of ways to represent n as the sum of n=a+b, where a and b are positive integers and a>b.

You have to answer *t* independent test cases.

Input

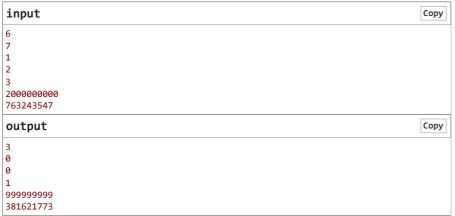
The first line of the input contains one integer t ($1 \le t \le 10^4$) — the number of test cases. Then t test cases follow.

The only line of a test case contains one integer n ($1 \le n \le 2 \cdot 10^9$) — the number of candies you have.

Output

For each test case, print the answer — the number of ways to distribute exactly n candies between two sisters in a way described in the problem statement. If there is no way to satisfy all the conditions, print 0.

Example



Note

For the test case of the example, the 3 possible ways to distribute candies are:

- a = 6, b = 1;
- a = 5, b = 2;
- a = 4, b = 3.

Codeforces Round 634 (Div. 3)

Finished

Practice



→ Virtual participation

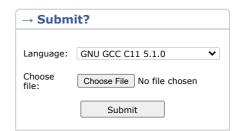
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Start virtual contest

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest



→ Last submissions		
Submission	Time	Verdict
224727861	Sep/23/2023 13:02	Accepted
224727745	Sep/23/2023 13:00	Wrong answer on test 1





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