Problem B: Grace and Christian's Divisor Duel

Filename: `divisorgame`
Time limit: `2 seconds`

Grace and Christian are siblings who compete in just about everything—whether it's racing up the stairs, solving puzzles, or eating the last cookie. Today, they've invented a game with a single number and some clever rules.

They call it the Divisor Duel.

Here's how it works:

- They start with a positive integer n ≥ 2.
- Grace always goes first (she's wiser).
- On each turn, the current player must choose a proper divisor d of the current number x, such that:
  - 1 ≤ d < x, and
  - x % d == 0.
- After choosing d, the number x is updated to x - d.
- The two players alternate turns.
- The first player who cannot make a move (i.e., when x = 1) loses the game.

Both players are very smart, and they play optimally—they'll do everything in their power to win. Given a number **n**, your task is to determine who will win the game.

Problem

You are given **c** test cases. For each test case, determine the winner of the Divisor Duel.
Output the name of the winner for each test case on a new line: either Grace or Christian.

Input

The first line will contain a single integer **c**, the number of test cases. The first (and only) line of each test case will contain one integer, **n**, the starting number for the game.

Output

For each round, output a new line containing a single string: "Grace" if Grace won the round, or "Christian" if Christian won the round. (Quotes added for clarity)

Input Bounds and Corresponding Credit

30 Points	70 Points
• 1 ≤ **c** ≤ 100,000 • 2 ≤ **n** ≤ 1,000	• 1 ≤ **c** ≤ 200,000 • 2 ≤ **n** ≤ 10^{12}

Samples

Input	Output
2	Grace
2	Christian
3	

Sample Explanations

- **n = 2:** Grace subtracts 1 → Christian gets 1 and has no moves → Grace wins.
- **n = 3:** Grace subtracts 1 → Christian gets 2 → Christian subtracts 1 → Grace gets 1 → Christian wins.