Problem 134: Go for Two?

Difficulty: Easy

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Problem Background

American Football is a hugely popular sport in the United States. Major companies often sponsor major tournament games called "bowl games," such as the Lockheed Martin Armed Forces Bowl. With as much attention as these games bring, there's a lot of pressure on coaches and players to perform at their best.

This pressure has increased the prevalence of sports analytics - the collection and analysis of historical statistics to help a team gain a competitive advantage over their opponent. Professional teams often have entire staffs dedicated to analyzing data and helping coaches make decisions based on that information.

Problem Description

One example of how analytics can be applied to a game is in making the decision to go for a one-point or two-point conversion after scoring a touchdown in American Football, particularly in the fourth quarter of the game. After scoring a touchdown, teams have the option to attempt to score an extra point by kicking the ball between the goal posts at the end of the field, or an extra two points by carrying the ball past the opposing team into the end zone.

Your team of analysts is working with a college competing in the Lockheed Martin Armed Forces Bowl to advise the coach when to call for a two-point conversion during the game's fourth quarter. Based on your team's and the opposing team's history, you've come up with this table of recommendations, based on how far ahead or behind your team is compared to their opponents.

Margin	Decision		Margin	Decision		Margin	Decision
Down by 15	2		Down by 5	2		Up by 5	2
Down by 14	1		Down by 4	2		Up by 6	1
Down by 13	2		Down by 3	1		Up by 7	1
Down by 12	1		Down by 2	2		Up by 8	1
Down by 11	2		Down by 1	1		Up by 9	1
Down by 10	2		Tied	1		Up by 10	1
Down by 9	1		Up by 1	2		Up by 11	1
Down by 8	2		Up by 2	1		Up by 12	2
Down by 7	1		Up by 3	1			

Down by 6	1		Up by 4	1			

For example, if your team is winning with 16 points to their opponent's 11 after scoring a touchdown, your team is up by 5 points and should try to make a two-point conversion. Any score margins not listed on the table should result in an attempt for a one-point conversion.

Sample Input

The first line of your program's input, received from the standard input channel, will contain a positive integer representing the number of test cases. Each test case will include two non-negative integers, separated by spaces. The first integer represents your team's score after they have scored a touchdown. The second integer represents the opposing team's score.

```
4
13 14
20 3
14 13
12 20
```

Sample Output

For each test case, your program must print a single line containing the number 1 or 2, indicating how many points your team should attempt to convert.

```
1
1
2
2
```