

CCC '06 J2 - Roll the Dice

Diana is playing a game with two dice. One die has m sides labelled $1, 2, 3, \dots, m$.

The other die has n sides labelled $1, 2, 3, \dots, n$.

Write a program to determine how many ways can she roll the dice to get the sum **10**.

For example, when the first die has 6 sides and the second die has 8 sides, there are 5 ways to get the sum **10**:

- $2 + 8 = 10$
- $3 + 7 = 10$
- $4 + 6 = 10$
- $5 + 5 = 10$
- $6 + 4 = 10$

Input

The input is given as two integers. First, the user will enter in the number m ($1 \leq m \leq 1000$).

Second, the user will enter the number n ($1 \leq n \leq 1000$).

Output

The program prints out the number of ways **10** may be rolled on these two dice. Note that in the output, the word "way" should be used if there is only one way to achieve the sum of **10**; otherwise, the word "ways" should be used in the output. That is, if there is only one way to get the sum **10**, the output should be:

```
There is 1 way to get the sum 10.
```

Sample Input 1

```
6
8
```

Sample Output 1

```
There are 5 ways to get the sum 10.
```

Sample Input 2

```
12
4
```

Sample Output 2

```
There are 4 ways to get the sum 10.
```

CCC problem statements in large part from the [PEG OJ](#)