

## Problem Statement

A jumpy number is a positive integer, all of whose adjacent digits differ by at least 2. For example,

NOT JUMPY: 28459, 28549, 1091919, 97753, 111111  
JUMPY: 290464, 13131313, 97539753, 5

Create a class JumpyNum that contains a method howMany that is given **low** and **high** and returns the number of jumpy numbers that are between **low** and **high**, inclusive.

## Definition

Class: JumpyNum  
Method: howMany  
Parameters: int, int  
Returns: int  
Method signature: int howMany(int low, int high)  
(be sure your method is public)

## Constraints

- **low** is between 1 and 2,000,000,000, inclusive.
- **high** is between **low** and 2,000,000,000, inclusive.

## Examples

0)

1  
10

Returns: 9

All the single digit numbers are jumpy, but 10 isn't since 1 and 0 differ by only 1.

1)

9  
23

Returns: 9

The jumpy ones are 9,13,14,15,16,17,18,19,20

2)

2000000000  
2000000000

Returns: 0

3)

8000  
20934

Returns: 3766