Design and implement an iterator to flatten a 2d vector. It should support the following operations: next and hasNext.

**Example:**

Vector2D iterator = new Vector2D([[1,2],[3],[4]]);

iterator.next(); // return 1

iterator.next(); // return 2

iterator.next(); // return 3

iterator.hasNext(); // return true

iterator.hasNext(); // return true

iterator.next(); // return 4

iterator.hasNext(); // return false

**Notes:**

1. Please remember to **RESET** your class variables declared in Vector2D, as static/class variables are **persisted across multiple test cases**. Please see [here](https://leetcode.com/faq/) for more details.
2. You may assume that next() call will always be valid, that is, there will be at least a next element in the 2d vector when next() is called.

**Follow up:**

As an added challenge, try to code it using only [iterators in C++](http://www.cplusplus.com/reference/iterator/iterator/) or [iterators in Java](http://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html).