

```
class ZigzagIterator(object):
```

```
    def __init__(self, v1, v2):
```

```
        """
```

```
        Initialize your data structure here.
```

```
        :type v1: List[int]
```

```
        :type v2: List[int]
```

```
        """
```

```
        self.vals = (v[i] for i in itertools.count() for v in (v1, v2) if i < len(v))
```

```
        self.n = len(v1) + len(v2)
```

```
    def next(self):
```

```
        """
```

```
        :rtype: int
```

```
        """
```

```
        self.n -= 1
```

```
        return next(self.vals)
```

```
    def hasNext(self):
```

```
        """
```

```
        :rtype: bool
```

```
        """
```

```
        return self.n > 0
```

```
# Your ZigzagIterator object will be instantiated and called as such:
```

```
# i, v = ZigzagIterator(v1, v2), []
```

```
# while i.hasNext(): v.append(i.next())
```