

[math]119. Pascal's Triangle II

Given an index k , return the k th row of the Pascal's triangle.

For example, given $k = 3$, Return `[1, 3, 3, 1]`.

Note: Could you optimize your algorithm to use only $O(k)$ extra space?

用迭代的思想。

1- 默认初始化为0，应该从后往前处理，相当于满足最后一个位1的情形。

2- 一层层的迭代处理

```
1  0  /// 补个0
1  1  0 /// i = 1
1  2  1  0 /// i = 2 <----- 从后往前
1  3  3  1  /// i = 3
```

结果如下：

```
class Solution {
public:
    vector<int> getRow(int rowIndex) {
        vector<int> res(rowIndex+1,0); // all initialize 0
        res[0] = 1;
        for( int i=1; i<= rowIndex; i++){
            for( int j = i; j >= 1; j-- )
                res[j] += res[j-1];
        }

        return res;
    }
};
```