

# [数学]118. Pascal's Triangle

Given *numRows*, generate the first *numRows* of Pascal's triangle.

For example, given *numRows* = 5, Return

```
[
  [1],
  [1,1],
  [1,2,1],
  [1,3,3,1],
  [1,4,6,4,1]
]
```

记得每一行的产生。1- 每一行的开头和结尾都是1 2- 第二个数字等于前一行的第1个和第二个的和

```
class Solution {
public:
    vector<vector<int>> generate(int numRows) {
        vector<vector<int> > res;
        if( numRows == 0 ) return res;

        for( int i=0; i< numRows;i++ ){
            vector<int > tmp;
            for(int j=0; j<=i; j++){
                if( j ==0 || j == i ){
                    tmp.push_back(1);
                }else{
                    tmp.push_back(res[i-1][j-1] + res[i-1][j]);
                }
            }
            res.push_back(tmp);
        }
        return res;
    }
};
```