

48. Rotate Image

题目描述: <https://leetcode.com/problems/rotate-image/>

给定一个二维数组，将其顺时针旋转90度
例如：

```
[[1,2,3]
 [4,5,6]
 [7,8,9]]
```

变成：

```
[[7,4,1]
 [8,5,2]
 [9,6,3]]
```

解题思路：

1. 先转置，再左右翻转
2. 先上下翻转，再转置

代码：

```

class Solution {
public:
    void rotate(vector<vector<int>>& matrix) {
        int n = matrix.size();
        vector<int> f(n);
        for(int i = 0; i < n; i++){
            for(int j = i+1; j < n; j++){
                f[j] = matrix[i][j];
                matrix[i][j] = matrix[j][i];
            }
            for(int j = i+1; j < n; j++){
                matrix[j][i] = f[j];
            }
        }
        for(int i = 0; i < n; i++){
            int l = 0, r = n-1;
            while(l < r){
                int t = matrix[i][l];
                matrix[i][l] = matrix[i][r];
                matrix[i][r] = t;
                l++;r--;
            }
        }
    }
};

```