Problem Link:

<https://leetcode.com/problems/diagonal-traverse/?envType=daily-question&envId=2025-08-25>

Solution:

class Solution {

public:

vector<int> findDiagonalOrder(vector<vector<int>>& mat) {

if(mat.empty() || mat[0].empty())

return {};

int m = mat.size();

int n = mat[0].size();

vector<int> v;

v.reserve(m \* n);

for(int d = 0; d < m + n - 1; ++d)

{

int r, c;

if(d % 2 == 0)

{

r = (d < m) ? d : m - 1;

c = d - r;

while(r >= 0 && c < n)

{

v.push\_back(mat[r][c]);

r--;

c++;

}

}

else

{

c = (d < n) ? d : n - 1;

r = d - c;

while(c >= 0 && r < m)

{

v.push\_back(mat[r][c]);

r++;

c--;

}

}

}

return v;

}

};