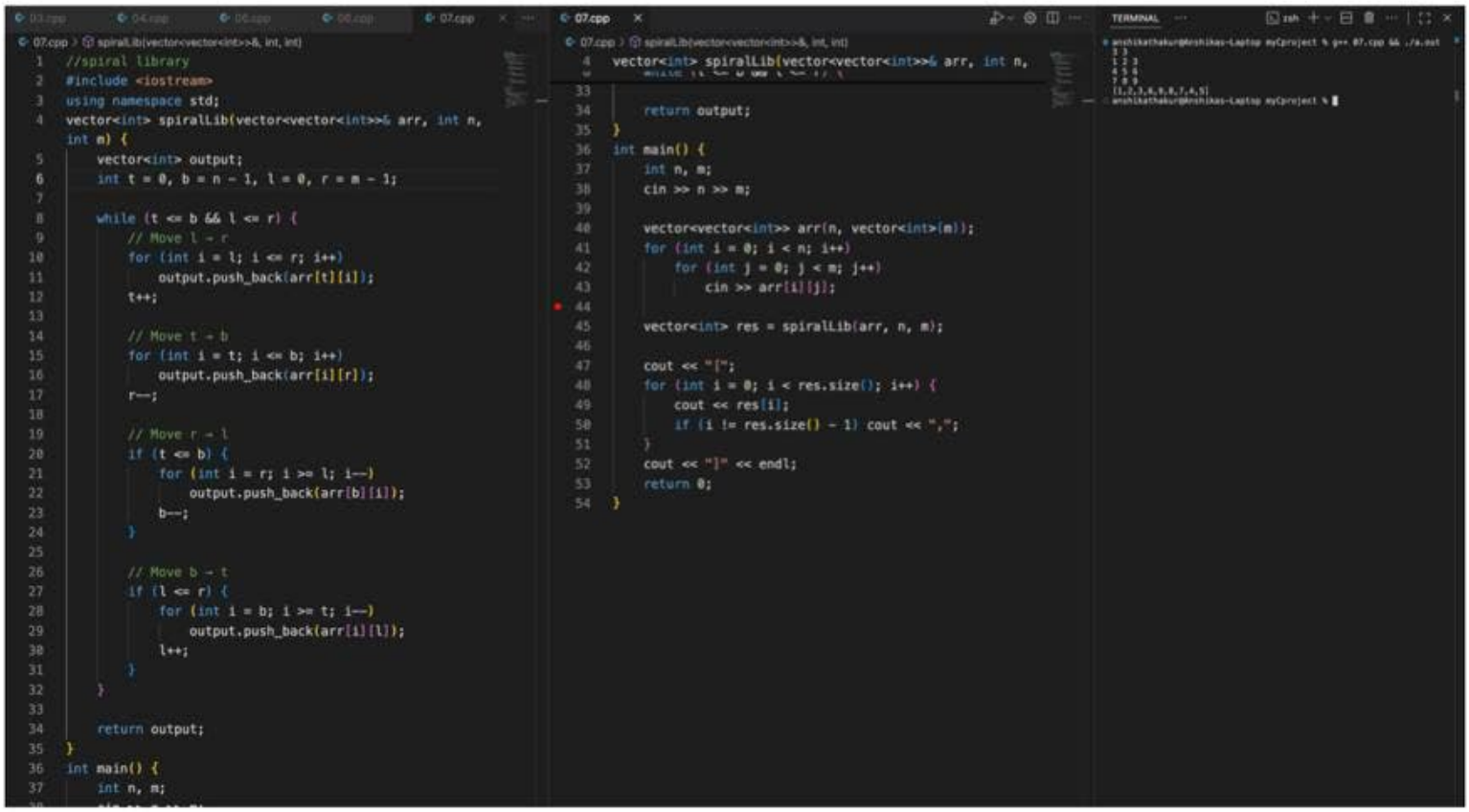
**Q7. The Spiral Library**

The King built a library where books are kept in spiral shelves. Print them in **spiral order**.

**Input**:

3 3
1 2 3
4 5 6
7 8 9

**Output**: [1,2,3,6,9,8,7,4,5]



```cpp
//spiral library
#include <iostream>
using namespace std;
vector<int> spiralLib(vector<vector<int>>& arr, int n,
int m) {
    vector<int> output;
    int t = 0, b = n - 1, l = 0, r = m - 1;

    while (t <= b && l <= r) {
        // Move l → r
        for (int i = l; i <= r; i++)
            output.push_back(arr[t][i]);
        t++;

        // Move t → b
        for (int i = t; i <= b; i++)
            output.push_back(arr[i][r]);
        r--;

        // Move r → l
        if (t <= b) {
            for (int i = r; i >= l; i--)
                output.push_back(arr[b][i]);
            b--;
        }

        // Move b → t
        if (l <= r) {
            for (int i = b; i >= t; i--)
                output.push_back(arr[i][l]);
            l++;
        }
    }

    return output;
}
int main() {
    int n, m;
```

```cpp
vector<int> spiralLib(vector<vector<int>>& arr, int n,

    return output;
}
int main() {
    int n, m;
    cin >> n >> m;

    vector<vector<int>> arr(n, vector<int>(m));
    for (int i = 0; i < n; i++)
        for (int j = 0; j < m; j++)
            cin >> arr[i][j];

    vector<int> res = spiralLib(arr, n, m);

    cout << "[";
    for (int i = 0; i < res.size(); i++) {
        cout << res[i];
        if (i != res.size() - 1) cout << ",";
    }
    cout << "]" << endl;
    return 0;
}
```

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