

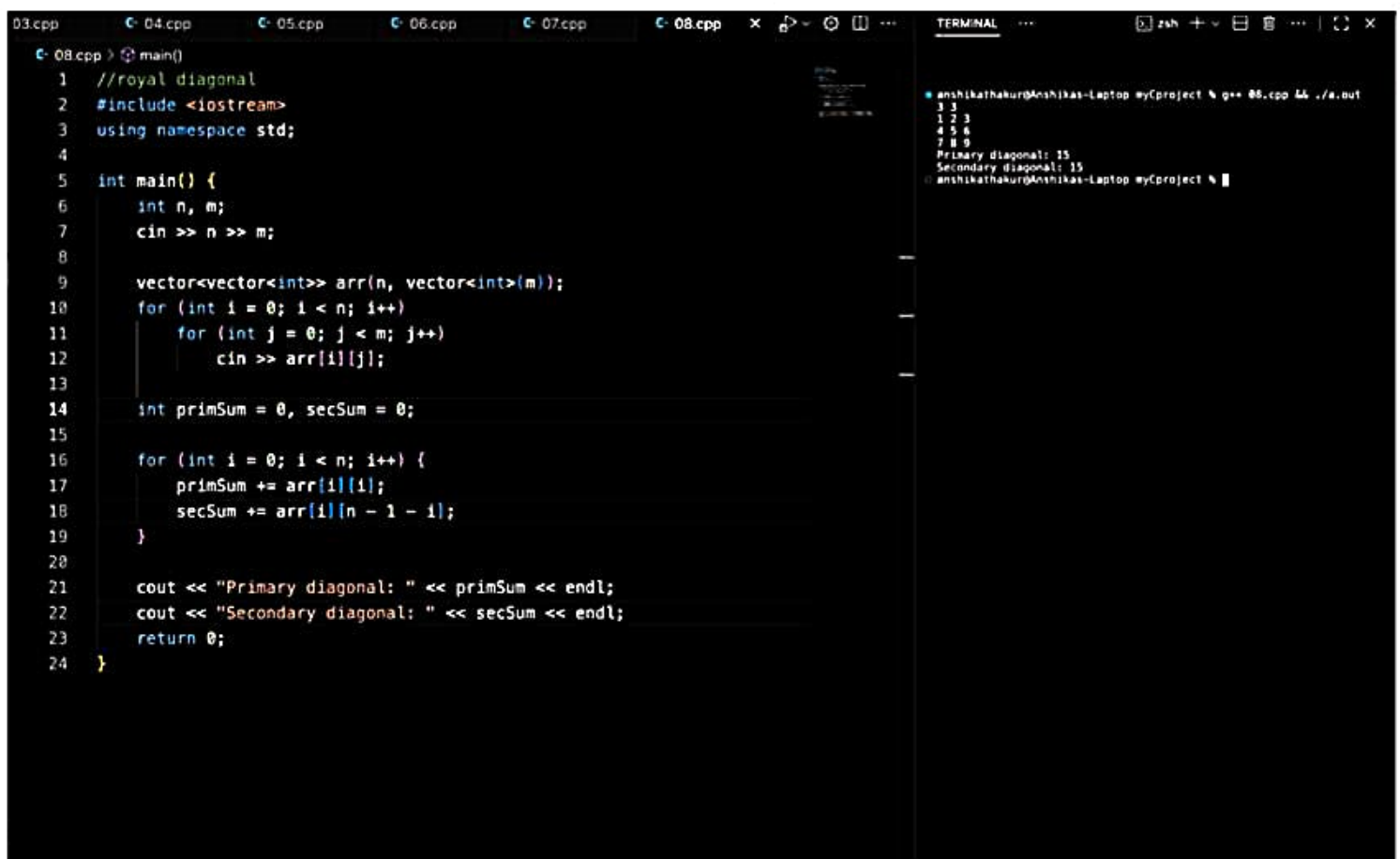
Q8. The Royal Diagonal

In a royal hall represented as a square, find sum of both diagonals.

Input:

```
3 3
1 2 3
4 5 6
7 8 9
```

Output: $1+5+9=15$, $3+5+7=15$



```
03.cpp 04.cpp 05.cpp 06.cpp 07.cpp 08.cpp x
08.cpp > main()
1 //royal diagonal
2 #include <iostream>
3 using namespace std;
4
5 int main() {
6     int n, m;
7     cin >> n >> m;
8
9     vector<vector<int>> arr(n, vector<int>(m));
10    for (int i = 0; i < n; i++)
11        for (int j = 0; j < m; j++)
12            cin >> arr[i][j];
13
14    int primSum = 0, secSum = 0;
15
16    for (int i = 0; i < n; i++) {
17        primSum += arr[i][i];
18        secSum += arr[i][n - 1 - i];
19    }
20
21    cout << "Primary diagonal: " << primSum << endl;
22    cout << "Secondary diagonal: " << secSum << endl;
23    return 0;
24 }
```

```
TERMINAL
zsh +
anshikathakur@Anshikas-Laptop myCproject % g++ 08.cpp && ./a.out
3 3
1 2 3
4 5 6
7 8 9
Primary diagonal: 15
Secondary diagonal: 15
anshikathakur@Anshikas-Laptop myCproject %
```