

Calculate Row Sum of Matrix

You are given a matrix of integers representing the scores of students in various subjects. Each row represents a student, and each column represents a subject. Your task is to calculate and print the sum of scores for each student.

1. The **rowSum** function takes a 2D matrix (**vector<vector<int>>**), the number of rows (**row**), and the number of columns (**col**) as parameters.
2. It iterates over each row using the **r** variable and initializes a sum variable to 0 for each row.
3. Within the row loop, it iterates over each column using the **c** variable and adds the element at **matrix[r][c]** to the sum.
4. After summing all the elements in the row, it prints the sum of that row.
5. In the **main** function, a sample matrix is defined, and the number of rows and columns are calculated using **matrix.size()** and **matrix[0].size()** respectively.
6. The **rowSum** function is called with the matrix, number of rows, and number of columns as arguments.

Time Complexity:

- The nested loops iterate over each element in the matrix, so the time complexity is **$O(\text{row} * \text{col})$** , where row is the number of rows and col is the number of columns.

Space Complexity:

- **The space complexity is $O(1)$** because no additional space is used that scales with the input size. The space used for the matrix is already allocated in memory.