

■ Revision Notes — Row Sum & Max Row Sum (Java)

■ Problem:

You are given an $n \times m$ matrix. Task: 1. Find the sum of each row. 2. Print each row's sum. 3. Find the maximum row sum among them.

■ Steps (Logic):

1. Input: Read n (rows), m (columns), and the matrix.
2. Row-wise Sum Calculation: For each row, reset $\text{sum}=0$, then add each element of the row.
3. Track Maximum Row Sum: After each row, compare sum with maxSum .
4. Final Output: Print maxSum at the end.

■ Dry Run Example:

Input:

$n = 3, m = 3$

Matrix:

1 2 3

4 5 6

7 8 9

Row 0 sum = $1+2+3 = 6 \rightarrow \text{maxSum} = 6$

Row 1 sum = $4+5+6 = 15 \rightarrow \text{maxSum} = 15$

Row 2 sum = $7+8+9 = 24 \rightarrow \text{maxSum} = 24$

Output:

6

15

24

24

■ Key Points to Remember:

- Reset sum to 0 at the start of each row.
- Update maxSum after finishing each row's sum.
- Initialize maxSum properly (better to use `Integer.MIN_VALUE`).
- Formula: Row Sum = add all elements in row i ; Max Row Sum = maximum of all row sums.