Name : Shantanu Shaligram Ingale

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Assignment : Maximum Value Code in Technology assigned

Technology : ASP .NET CORE (Web App MVC)

Under Guidance : Niranjan Aradhye Sir.

PROBLEM DEFINITION

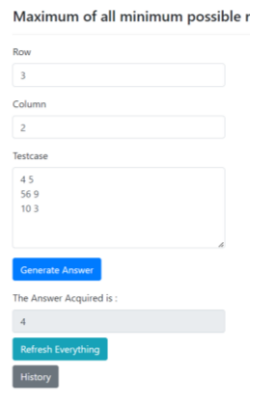
Given is a matrix denoting a weighted table. Find a rectangle of sides of length at least 2, such that the minimum weight from the 4 corners of the rectangle is maximized. That is for the table ***A[N][M]***, find the maximum value of MIN(*A*[i1][j1], *A*[i1][j2], *A*[i2][j1], *A*[i2][j2]) such that 1 <= *i1* < *i2* <= *N* and 1 <= *j1* < *j2* <= *M*.

SOLUTION

- Solution is created in Repository Pattern introduced in technology.
- Aims in solution is
    1. To take user input for *ROW* , *COLUMN* and *INPUT* for any test case.
    2. Generate Result and also save the record in database

☐ MAIN LOGIC AND VIEW PAGE

```
public float CalculateResult(List<List<float>> matrix, int row, int col)
{
    float maxValue = 0;
    for (int i = 0; i < row; i++)
    {
        for (int j = 0; j < col; j++)
        {
            for (int k = i+1; k < row; k++)
            {
                for (int l = j+1; l < col; l++)
                {
                    float currMin = new List<float>() { matrix[i][j], matrix[i][l],
                                                        matrix[k][j], matrix[k][l] }.Min();
                    maxValue = Math.Max(maxValue, currMin);
                }
            }
        }
    }
    return maxValue;
}
```



☐ TEST CASES RESULTS AS HISTORY IN VIEW

ID	Test Case	Answer
15	[2] [2] 1 2 3 4	1
16	[3] [3] 1 0 0 0 1 1 1 0 0	0
17	[5] [4] 1 8 3 5 2 5 4 2 3 4 5 6 1 4 2 6 2 8 1 7	5
18	[4] [4] 5411 215 554 5615 4572 22742 353 548 5274 22472 356 454 3742 4274 42 347	4572

Clear the History

Solve New Case