

21.Matrix add

```
public class MatrixMultiplication {  
    public static void main(String[] args) {  
        int[][] mat1 = {{1, 2}, {5, 3}};  
        int[][] mat2 = {{2, 3}, {4, 1}};
```

```
        int[][] result = multiplyMatrices(mat1, mat2);
```

```
        System.out.println("Mat Sum = ");  
        for (int i = 0; i < result.length; i++) {  
            for (int j = 0; j < result[i].length; j++) {  
                System.out.print(result[i][j] + " ");  
            }  
            System.out.println();  
        }  
    }  
}
```

```
public static int[][] multiplyMatrices(int[][] mat1, int[][] mat2) {  
    int row1 = mat1.length;  
    int col1 = mat1[0].length;  
    int col2 = mat2[0].length;
```

```
    int[][] result = new int[row1][col2];
```

```
    for (int i = 0; i < row1; i++) {  
        for (int j = 0; j < col2; j++) {  
            int sum = 0;  
            for (int k = 0; k < col1; k++) {  
                sum += mat1[i][k] * mat2[k][j];  
            }  
            result[i][j] = sum;  
        }  
    }  
}
```

```
    return result;
```

```
    }  
}
```

