Engineering Animuthyam

Java DSA – Course Part - 21

2d Arrays Thop leetcode problem

Hello machas, Bagunnara.

Diagonal Sum

Reverse Diagonal Sum

Diagonal Equal

Reverse Diagonal Equal

766. Toeplitz Matrix

https://leetcode.com/problems/toeplitz-matrix/description/

Solution:

```java
class Solution {
    public boolean isValid(int[][] matrix, int y, int x){
        int r = matrix.length;
        int c = matrix[0].length;
        int val = matrix[y][x];
        y++;
        x++;
        while(y<r && x<c){
            if(matrix[y][x]!=val){
                return false;
            }
            y++;
            x++;
        }
        return true;
    }
    public boolean isToeplitzMatrix(int[][] matrix) {
        int r = matrix.length;
        int c = matrix[0].length;
        boolean ans = true;
        for(int i=0;i<c;i++){
            if(!isValid(matrix,0,i)){
                ans = false;
            }
        }
        for(int i=1;i<r;i++){
            if(!isValid(matrix,i,0)){
                ans = false;
            }
        }
        return ans;
    }
}
```