6148. Largest Local Values in a Matrix

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User Accepted:	1
User Tried:	2
Total Accepted:	1
Total Submissions:	2
Difficulty:	Easy

You are given an `n x n` integer matrix `grid`.

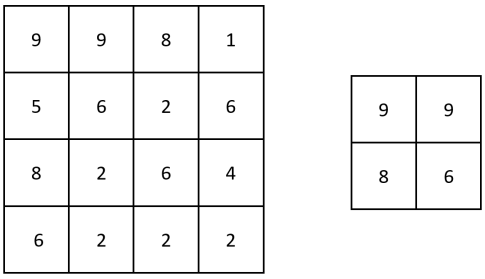
Generate an integer matrix `maxLocal` of size `(n - 2) x (n - 2)` such that:

- `maxLocal[i][j]` is equal to the **largest** value of the `3 x 3` matrix in `grid` centered around row `i + 1` and column `j + 1`.

In other words, we want to find the largest value in every contiguous `3 x 3` matrix in `grid`.

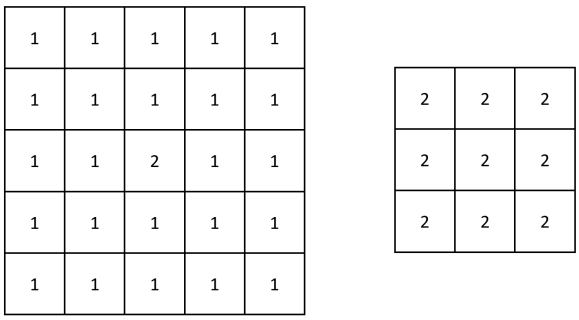
Return *the generated matrix*.

Example 1:




```
Input: grid = [[9,9,8,1],[5,6,2,6],[8,2,6,4],[6,2,2,2]]
Output: [[9,9],[8,6]]
Explanation: The diagram above shows the original matrix and the generated matrix.
Notice that each value in the generated matrix corresponds to the largest value of a contiguous 3 x 3 matrix in grid.
```

Example 2:




```
Input: grid = [[1,1,1,1,1],[1,1,1,1,1],[1,1,2,1,1],[1,1,1,1,1],[1,1,1,1,1]]
Output: [[2,2,2],[2,2,2],[2,2,2]]
Explanation: Notice that the 2 is contained within every contiguous 3 x 3 matrix in grid.
```

Constraints:

- `n == grid.length == grid[i].length`
- `3 <= n <= 100`
- `1 <= grid[i][j] <= 100`

JavaScript

```
const initialize2DArray = (n, m) => { let d = []; for (let i = 0; i < n; i++) { let t = Array(m).fill(0); d.push(t); }
return d; };

const largestLocal = (g) => {
    let n = g.length, res = initialize2DArray(n - 2, n - 2);
    for (let i = 0; i < n - 2; i++) {
        for (let j = 0; j < n - 2; j++) {
```

```
            let d = [g[i][j], g[i][j + 1], g[i][j + 2], g[i + 1][j], g[i + 1][j + 1], g[i + 1][j + 2], g[i + 2][j], g[i + 2][j + 1], g[i + 2][j + 2]];
            res[i][j] = Math.max(...d);
        }
    }
    return res;
};
```

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