

# 85. Maximal Rectangle

## Difficulty : Hard

<https://leetcode.com/problems/maximal-rectangle>

Given a `rows` x `cols` binary matrix filled with 0's and 1's, find the largest rectangle containing only 1's and return *its area*.

### Example 1:

1	0	1	0	0
1	0	1	1	1
1	1	1	1	1
1	0	0	1	0

**Input:** matrix = `[["1","0","1","0","0"],["1","0","1","1","1"],["1","1","1","1","1"],["1","0","0","1","0"]]`

**Output:** 6

**Explanation:** The maximal rectangle is shown in the above picture.

### Example 2:

**Input:** matrix = `[["0"]]`

**Output:** 0

### Example 3:

**Input:** matrix = `[["1"]]`

**Output:** 1

### Constraints:

- `rows == matrix.length`
- `cols == matrix[i].length`
- `1 <= row, cols <= 200`
- `matrix[i][j]` is '0' or '1'.