

1183. Maximum Number of Ones

Hard

54

8

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Consider a matrix M with dimensions $width * height$, such that every cell has value 0 or 1 , and any **square** sub-matrix of M of size $sideLength * sideLength$ has at most $maxOnes$ ones.

Return the maximum possible number of ones that the matrix M can have.

Example 1:

```
Input: width = 3, height = 3, sideLength = 2, maxOnes = 1
Output: 4
Explanation:
In a 3*3 matrix, no 2*2 sub-matrix can have more than 1 one.
The best solution that has 4 ones is:
[1,0,1]
[0,0,0]
[1,0,1]
```

Example 2:

```
Input: width = 3, height = 3, sideLength = 2, maxOnes = 2
Output: 6
Explanation:
[1,0,1]
[1,0,1]
[1,0,1]
```

Constraints:

- $1 \leq width, height \leq 100$
- $1 \leq sideLength \leq width, height$
- $0 \leq maxOnes \leq sideLength * sideLength$

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