

Problem 1240: Tiling a Rectangle with the Fewest Squares

Problem Information

Difficulty: Hard

Acceptance Rate: 54.60%

Paid Only: No

Tags: Backtracking

Problem Description

Given a rectangle of size `n` x `m`, return _the minimum number of integer- sided squares that tile the rectangle_.

Example 1:

Input: n = 2, m = 3 **Output:** 3 **Explanation:** 3 squares are necessary to cover the rectangle. 2 (squares of 1x1) 1 (square of 2x2)

Example 2:

Input: n = 5, m = 8 **Output:** 5

Example 3:

Input: n = 11, m = 13 **Output:** 6

Constraints:

`* `1 <= n, m <= 13``

Code Snippets

C++:

```
class Solution {  
public:  
    int tilingRectangle(int n, int m) {  
  
    }  
};
```

Java:

```
class Solution {  
public int tilingRectangle(int n, int m) {  
  
}  
}
```

Python3:

```
class Solution:  
    def tilingRectangle(self, n: int, m: int) -> int:
```