Cutting Rectangles

Given a rectangle of dimensions $\mathbf{L} \times \mathbf{B}$ find the minimum number (\mathbf{N}) of identical squares of maximum side that can be cut out from that rectangle so that no residue remains in the rectangle. Also find the dimension \mathbf{K} of that square.

Example 1:

Input: L = 2, B = 4

Output: N = 2, K = 2

Explaination: 2 squares of 2x2 dimension.

Example 2:

Input: L = 6, B = 3

Output: N = 2, K = 3

Explaintion: 2 squares of 3x3 dimension.

Your Task:

You do not need to read input or print anything. Your task is to complete the function **minimumSquares()** which takes L and B as input parameters and returns a list of 2 integers containing the values of N and K respectively.

 $\textbf{Expected Time Complexity:} \ O(log \ min(L, B))$

Expected Auxiliary Space: O(1)

Constraints:

 $1 \le L, B \le 10^9$