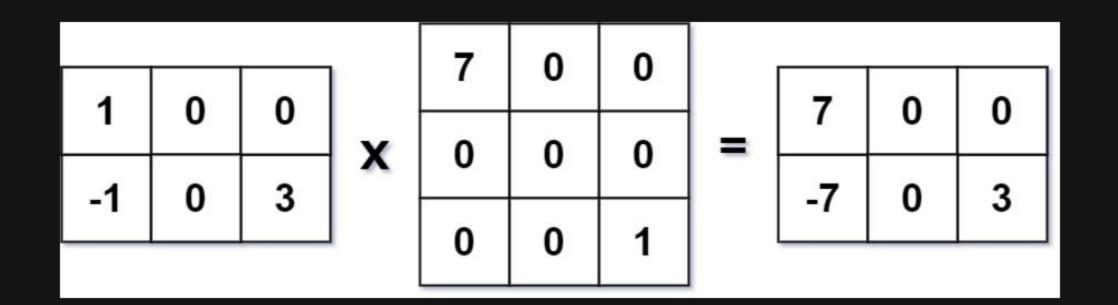
# 311. Sparse Matrix Multiplication

## Description

Given two sparse matrices [mat1] of size  $[m \times k]$  and [mat2] of size  $[k \times n]$ , return the result of  $[mat1 \times mat2]$ . You may assume that multiplication is always possible.

#### Example 1:



Input: mat1 = [[1,0,0],[-1,0,3]], mat2 = [[7,0,0],[0,0,0],[0,0,1]]
Output: [[7,0,0],[-7,0,3]]

### Example 2:

Input: mat1 = [[0]], mat2 = [[0]]
Output: [[0]]

#### **Constraints:**

- m == mat1.length
- k == mat1[i].length == mat2.length
- n == mat2[i].length
- 1 <= m, n, k <= 100
- -100 <= mat1[i][j], mat2[i][j] <= 100