TOO UNIQUE

CHALLENGE DESCRIPTION:

You are given a matrix of size N×M elements, filled with lowercase ASCII letters from 'a' to 'z'. Find the max size of rectangular contiguous submatrix of unique (i.e. non repeated within a given submatrix) elements. Find all submatrices of unique elements of this size and replace their elements with asterisks '*'.

INPUT SAMPLE:

The first argument is a file that contains the input matrix. E.g.



OUTPUT SAMPLE:

Print to stdout the result of the matrix with replaced elements, where all elements of the biggest submatrixes of unique elements are replaced with asterisks '*'.

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rzqicaiiae**
ccwnulljyb**
jxtx***uwu**
oqik****zp**
vbla****bd**
ahje****cl**
```

CONSTRAINTS:

1. The size of matrix in the input is 60×20 elements.