Problem B
Campus
Time Limit: 1 second

In the campus of University of Science, students can freely access to the Internet via a system of access points. The area of the campus is divided into N rows and M columns. The signal strength of the access point in cell (i, j) is $S[i, j]$. If there is no access point in cell (i,j), $S[i,j] = 0$.

When you are in cell (i, j), your device can automatically connect to an access point with the highest signal strength in that cell and its 4-adjacent cells. The connection strength $C[i, j]$ in cell (i, j) is determined as follow:

$$C[i, j] = \max \{S[i, j], S[i + 1, j], S[i – 1 , j], S[i, j + 1], S[i, j – 1]\}$$

Signal strength beyond the area of the campus is assumed to be zero.

Input

The first line contains two positive integers N and M, $0 < M, N < 100$

Each of the following N lines contains M non-negative integer numbers $S[i, j] \leq 256$.

Output

Display N lines, each contains M non-negative integer numbers $C[i, j]$.

Sample Input	Sample Output
5 6 0 0 0 0 0 0 0 0 10 0 0 0 0 0 0 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 10 0 0 0 0 10 10 14 0 0 0 0 14 14 14 0 0 0 0 14 0 0 0 0 0 0 0 0