Given a square matrix $M$ of $n \times n$ (with $n \geq 1$) of integers, its matrix minMax is the matrix $mM$ of $n \times 2$ such that for all $i$ (with $0 \leq i < n$), $mM[i][0]$ is the minimum element of the $i$-th row of $M$ and $mM[i][1]$ is the maximum element of the $i$-th column of $M$.

For instance, if $M = [[1, 2, 3], [3, 1, 2], [2, 3, 1]]$, $mM = [[1, 3], [1, 3], [1, 3]]$

Implement the $\text{min}\_\text{Max}(M)$ function that given the square matrix $M$ returns its minMax matrix.

You can use the $\text{min}()$ and $\text{max}()$ functions of Python, that given a list, they return their minimum and maximum element respectively.

Sample session

```python
>>> min\_Max([[1,2,3],[3,1,2],[2,3,1]])
[[1, 3], [1, 3], [1, 3]]
>>> min\_Max([[100]])
[[100, 100]]
>>> min\_Max([[2,2],[2,2]])
[[2, 2], [2, 2]]
>>> min\_Max([[17, 4],[1,1]])
[[4, 17], [1, 4]]
>>> min\_Max([[5, 1, 2, 1, -2],[1,21,-1,-2,8],[2,3,1,6,6],[1,2,3,4,5]])
[[-2, 5], [-2, 21], [1, 3], [1, 6]]
```

Problem information

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