

$$MFind(M) := \left| \text{col} \left(\text{findrows} \left(\text{eval} \left(\text{augment} \left(k := [1..\text{length}(M)], \overrightarrow{M \neq 0}_k \right) \right), 1, 2 \right), 1 \right) \right|$$

Example

$$A := \begin{bmatrix} 5 & 9 & 4 & 8 & 0 & 5 & 5 & 0 & 5 & 5 \\ 0 & 0 & 4 & 7 & 2 & 7 & 1 & 4 & 0 & 7 \\ 4 & 9 & 8 & 8 & 8 & 9 & 1 & 4 & 7 & 2 \\ 2 & 4 & 5 & 4 & 7 & 3 & 3 & 6 & 7 & 9 \\ 7 & 3 & 1 & 0 & 2 & 7 & 6 & 0 & 0 & 8 \\ 2 & 2 & 2 & 7 & 7 & 6 & 1 & 6 & 0 & 0 \\ 4 & 1 & 2 & 2 & 2 & 6 & 4 & 0 & 9 & 8 \\ 4 & 5 & 7 & 1 & 9 & 0 & 7 & 8 & 6 & 1 \end{bmatrix}$$

$$test(x) := (x \geq 8)$$

Positions

$$pos := MFind(\overrightarrow{test(A)})$$

$$pos^T = [2 \ 4 \ 22 \ 23 \ 24 \ 25 \ 26 \ 40 \ 50 \ 69 \ 70 \ 75 \ 78]$$

Values

$$vals := A_{pos}$$

$$vals^T = [9 \ 8 \ 9 \ 8 \ 8 \ 8 \ 9 \ 9 \ 8 \ 9 \ 8 \ 9 \ 8]$$

Redefining values of A that verify test

$$A_{pos} := 100 + A_{pos}$$

$$A = \begin{bmatrix} 5 & 109 & 4 & 108 & 0 & 5 & 5 & 0 & 5 & 5 \\ 0 & 0 & 4 & 7 & 2 & 7 & 1 & 4 & 0 & 7 \\ 4 & 109 & 108 & 108 & 108 & 109 & 1 & 4 & 7 & 2 \\ 2 & 4 & 5 & 4 & 7 & 3 & 3 & 6 & 7 & 109 \\ 7 & 3 & 1 & 0 & 2 & 7 & 6 & 0 & 0 & 108 \\ 2 & 2 & 2 & 7 & 7 & 6 & 1 & 6 & 0 & 0 \\ 4 & 1 & 2 & 2 & 2 & 6 & 4 & 0 & 109 & 108 \\ 4 & 5 & 7 & 1 & 109 & 0 & 7 & 108 & 6 & 1 \end{bmatrix}$$

Alvaro

$$\text{appVersion}(4) = "1.0.8348.30405"$$