







In MATLAB using only **one** command try to create the following matrices?

Note. Please do not use the traditional way or method such as (i.e. $A = [1\ 2\ 3\ 4\ 5;]$)

For **help** you can use the following commands:

 $x_i : st : x_f$; linspace(x_i , x_f , N); ones(r, c); zeros(r, c); eye(r, c) and diag()

$$C = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 \\ 0 & 2 & 0 & 0 & 0 \\ 0 & 0 & 3 & 0 & 0 \\ 0 & 0 & 0 & 4 & 0 \\ 0 & 0 & 0 & 0 & 5 \end{bmatrix}; \tag{1}$$

$$D = \begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & -1,5 & 0 & 0 & 0 \\ 0 & 0 & -3 & 0 & 0 \\ 0 & 0 & 0 & -4,5 & 0 \\ 0 & 0 & 0 & 0 & -6 \end{bmatrix};$$
(2)

$$E = \begin{bmatrix} 88 & 0 & 0 & 88 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 88 & 0 & 0 & 88 \end{bmatrix}; \tag{3}$$



$$F = \begin{bmatrix} 51 & 0 & 0 & 0 & 0 & 0 \\ 0 & 41 & 0 & 0 & 0 & 0 \\ 0 & 0 & 31 & 0 & 0 & 0 \\ 0 & 0 & 0 & 21 & 0 & 0 \\ 0 & 0 & 0 & 0 & 11 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 \end{bmatrix}; \tag{4}$$

$$M = \begin{bmatrix} 1 & 0 & 0 & 1 & 0 & 0 \\ 0 & 1 & 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 & 0 & 1 \end{bmatrix} \tag{7}$$