1. Create a row vector that has the following elements: 8, 10/4, 12×1.4, 51, tan 85°,√26 , and 0.15.
2. Create a row vector in which the first element is 1 and the last element is 43, with an increment of 6 between the elements (1, 7, 13, … , 43).

3. Create the vector x having 50 logarithmically spaced values starting at 10 and ending at 1000.
4. Use a single command to create a row vector (assign it to a variable named b) with 11 elements, such that

   b = 0 2 4 6 8 10 12 9 6 3 0

   Do not type the vector explicitly.
5. Create two row vectors: **a**=2:3:17 and **b**=3:4:15. Then, by only using the name of the vectors (**a** and **b**), create a row vector c that is made from the elements of **a** followed by the elements of **b**.
6. A Type this matrix in MATLAB and use MATLAB to carry out the following Instructions:

   A = [-5 9 6 -4 12 ; 13 15 10 2 8 ; 5 3 7 11 1]

   a. Create a vector v consisting of the elements in the second column of ***A***..

   b.Create a vector w consisting of the elements in the second row of ***A***.

   c. create a matrix m consisting of the elements in the 1 and 2 row and 2 column and 3 column.

7. Create the following matrix by typing one command. Do not type individual elements explicitly.

$$C = \begin{bmatrix} 7 & 7 & 7 & 7 & 7 \\ 7 & 7 & 7 & 7 & 7 \end{bmatrix}$$

8. Create the following matrix by typing one command. Do not type individual elements explicitly.

$$D = \begin{bmatrix} 0 & 0 & 0 & 0 & 8 \\ 0 & 0 & 0 & 0 & 7 \\ 0 & 0 & 0 & 0 & 6 \end{bmatrix}$$

9. Create the following matrix by typing one command. Do not type individual elements explicitly.

$$F = \begin{bmatrix} 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 10 & 20 \\ 0 & 0 & 2 & 8 & 26 \\ 0 & 0 & 3 & 6 & 32 \end{bmatrix}$$

10. Given the matrix A and B as below determine the following:

1- AXb
2- Max number in A and B.
3- Multiply first row from A and first column from B (dot and cross)
4- Add elements (1,2,5,10) as rows to A.
5- Find the values in matrix A elements which are greater than 10.
6- Sum (A and B).

11. Given vector V as below determine the following:
1- Transpose the vector.
2- Get the values of V from element 3 to element 5 in a new vector S.
3- Delete the last element in vector V.

A = [10 5 15 8 ; 2 5 8 7 ; 10 50 26 30]

B = [10 5 7 ; 2 8 9 ; 10 15 20 ; 15 20 30]

V = [10 5 10 20 15 16 8]