
Remember to indent the bodies of your IF-THEN and looping structures.

- 1) (8 pts) Write a MATLAB script that will do the following:
 - a) Load the data file `hw12_1.dat` into a vector `x`.
 - b) Determine the number of elements in the vector `x`.
 - c) Determine the total number of negative values and the total number of positive values in the vector using a `for` loop.
- 2) (5 pts) Consider the function

$$y = \begin{cases} x^2 - 1 & \text{if } x \text{ is divisible by 3} \\ x^2 + 3 & \text{if } x \text{ is not divisible by 3} \end{cases}$$

Write a MATLAB script that will generate a vector `x` containing the elements from -20 to 20 in steps of 1, then evaluates the function `y` for this vector using a `for` loop.