Module 4: Matrices, Arrays and Logical Vectors

Instructions

1. Do exercise 5.4 on page 126 of the textbook.
   o Submit an m-file named: tax_computation_LastName.m.
2. Starting with the structure plan specified in the file **find_interval.m**, create an m-file that uses logical vectors to find the portion of a set of Gaussian random numbers that fall within a certain interval. The set of Gaussian numbers are given in the MAT-file **interval_data.mat (MS Access)**. The m-file should also save and plot the portion in the interval. Finally, the m-file should also find the index and value of the maximum value in the original set of numbers and the final set of numbers.
3. Following the polynomial curve fit screencast, start with the structure plan specified in the file **poly_curv_fit.m** and create an m-file that will fit a 3rd order polynomial to the noisy data set provided in the MAT-file **noisy_poly.mat (MS Access)**. The m-file will output the model coefficients and will plot the fitted-curve along with the noisy input data.
4. Please use the **Homework template (Word)** when submitting your work.

For this exercise, you should submit the following files in the M4 Exercise submission area:

1. tax_computation_LastName.m
2. find_interval_LastName.m
3. poly_curv_fit_LastName.m

Note: Substitute your last name for LastName in all submitted files.

Please refer to the Course Schedule for due date.

Ohio University - Athens, Ohio