Final Project

Submission due to Gradescope at **11:59pm on 04/28/23**

The two problems you propose and solve for the final project are to be presented in a clean, professional document and submitted to Gradescope by the above date. The overal requirements for the problems and their presentation are summarized below.

The coding requirements for the final project are that, between the 2 problems, you must:

- Generate at least one plot.

- Use at least one looping structure (e.g., a for-end or a while-end structure).

- Use at least one conditional structure (e.g., an if-elseif-end structure), and provide a flowchart for the corresponding script.

- Import data in some form.

The Final Deliverable is a report-style submission with your problems and their corresponding solutions.

- Overall document structure

  1. Cover Page/Introduction (2-3 paragraphs): This is the first page and introduction to your document. Here you should briefly describe why we use MATLAB, how the problems you're solving demonstrate the value of computational problem solving, and provide a general introduction to your problems.
  2. Table of Contents: This will help the reader navigate your document. Include names and page numbers of all major components of your document.
  3. Problems: For each problem, you should provide
      i) The problem statement. Include the givens, any relevant schematics, and clearly define the question you are to answer.
          * For any figures you might include, I encourage you to make them in PowerPoint then save the figure as an image that can be imported to your typsetting program of choice.
      ii) Any final results developed by the code (e.g. figures or final numbers).
          * Here, you should provide some sort of discussion about your results (1 paragraph). What things can be learned from your solution? How couls your code be used/expnaded?
      iii) The code you wrote to develop the answer. Remember to appropriately comment your code so that someone else can read your code and understand how it answers/solves the given problem.
      iv) Additional documentation to supplement your solution (e.g. a flow chart of your code's logic flow).