Assignment 14 **Due: 11:00PM 12/08/23**

Purpose: The purpose of this assignment is to gain experience with with producing a document using LaTeX.

Your goal: Using the code you produced for Assignment 10 make a 2-D Gnuplot heat map image (output in encapsulated Postscript form) that depicts your converged solution to the 2-D conducting box electrical potential problem. Using LaTeX produce a short document that describes the partial differential equation that was solved, the finite-difference form of the equation, an enumerated step-by-step description of the iterative algorithm that was used to solve the equation, and the final result that you obtained. Your code will be graded on how well you typeset your equations and how clearly you describe the algorithm and your results!

For simplicity, name the heatmap image file (which your are to include into the LaTeX document using the **epsfig** package) <yourfirstname_lastname>_heatmap.eps (Do not include the angle brackets in the filename)

You should submit both the LaTeX file and the EPS file (just upload one at a time). Your LaTeX file must be processed by LaTeX on the Mathlab machines without errors or you will receive a zero on this assignment!

Note: Make sure that your submission conforms to the **Instructions for Source Code Submission** instructions and that you have followed all of the **Good Programming Tips** in the notes!