

Math 3620 Machine Problem 0: Due Tu. Jan. 15, 2019

- 1) Write a matlab script that does the following:
 - a) Prompts the user for a file name
 - b) opens the file and reads an integer n , an $n \times n$ matrix A , and an n -vector b .
 - c) Solves the linear system $Ax = b$ and prints the numerical answer x^* . Use `fprintf` with the format `%20.10f`
 - d) Computes the residual $r = b - Ax^*$ and prints `norm(r,inf)`, the max absolute value of the entries in r . Use `fprintf` with the format `%5.2e`
- 2) Run the program using the file `mp0.dat` posted on the website.
- 3) Turn in a complete listing of your code along with all output.