Lab 14

Ch En 263 – Numerical Tools

Due: 7 Mar. 2024

Instructions

- Complete the exercise(s) below, and submit the following files to Learning Suite:
 - Handwritten portion: scan each page (or take a picture) and combine them into a single pdf named: LastName_FirstName_Lab14.pdf
 - Excel portion: submit a workbook named LastName_FirstName_Lab14.xlsx where each worksheet tab is named "Problem_1", "Problem_2", etc.
 - Python portion: submit a separate file for each problem named LastName_FirstName_Lab14_ProblemXX.py where XX is the problem number.
- \bullet Warning: the LS assignment will close promptly at 11:59 pm and late assignments will only receive 50% credit.

Lab Exercises

1. Use Python to solve for the single root in the following system with three equations and three unknowns

$$x^{2} + y^{2} = 1$$
$$xy + yz = -1.1$$
$$y^{2} + z^{2} = 2$$

in Python. Hint: A reasonable initial guess is x = 2, y = 2, z = 1.