CS29006: Systems Programming Lab
Spring 2025
Grading Guideline for Assignment 1
Total Marks: 35

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1. Output (15 marks)
    a. Take commandline.txt and run it as a shell script. It should at least allow you to enter no. of rows and no. of columns of a matrix: 10 marks
        i. Missed commands to create the directories, can add them at the beginning of the script before running. Deduct 2.
        ii. Missed actually running the executable in the commandline.txt, can add it at the end of the script before running. Deduct 2.
        iii. No marks (ZERO) if finally the executable is not run.
    b. readMatrix, printmatrix works correctly: 1 marks each (total 2)
    c. addMatrix, submatrix, multMatrix works correctly: 1 marks each (total 3)
2. Code (16 marks)
    a. Defs.h (4 marks)
        i. Correct type definition: 2 marks
        ii. Ifndef/#define etc. to ensure this is not included more than once: 2 marks
    b. matIO.h and matAlg.h (4 marks)
        i. Proper include and prototypes (as per question), 2 marks for each file
        ii. Deduct 1 from each if prototype mentioned is not followed
    c. matIO.c and matAlg.c (8 marks)
        i. readMatrix, printMatrix – 2 marks each (total 4)
        ii. addMatrix, submatrix, multMatrix – 3 marks each (total 9)
            1. 1 mark for compatibility check and failure case, 2 marks for actual operation if compatible
            2. 2 mark if at least prototype is correct AND code is more or less ok even if not fully correct
        iii. Deduct 2 (for each file where it occurs) if they have used more than one include file. Exception allowed for main function file.
        iv. Deduct 4 if Matrix type defined in defs.h is not used.
    d. Commandline.txt (4 marks)
        i. Proper command for object file generation: 2 marks
        ii. Proper command for library creation: 2 marks