You may again submit a diary file of your work session. However, if you write or use any M-files, please submit them as well so that I can reproduce your work.

All problems are taken from our textbook Experiments in MATLAB.

1. Do Exercise 5.1 (Two-by-two). In particular, what's the difference between the problems in parts (c) and (d)?
2. Do Exercise 5.4 (Matrix equations).
3. Do Exercise 5.5 (More fruit).
4. Do Exercise 5.6 (Truss).
5. Do Exercise 6.2 (Flip the fern).
6. Do Exercise 6.7 (Sierpinski's triangle). Concentrate on fern.m. You will probably want to change the viewing window by using axis ([lllll $\left.\left.\begin{array}{lll}0 & 1 & 0\end{array} 1\right]\right)$ and axis square instead of axis([-3 3 (10]).
7. [Extra Credit] Can you modify your sierpinski.m code so that it produces a square Sierpinski carpet, i.e., the $2 D$ Menger sponge?

