Chem. 2440 – HW # 6.

assigned 3/16. Due 3/28.

1. Using the program at www.physics.buffalo.edu/gonsalves/ComPhys_1998/Java/Ising.html

run simulations at T = 1.75, 2.0, 2.25, 2.5, 2.75, for both for L = 4 and 8. (T is in units of J/k.) Be careful to carry out each simulation separately and that you begin averaging after a suitable equilibration period.

Plot E, C_v, and M vs. T for each value of L. Discuss your conclusions about the critical point and critical exponents.

2. Problem 12-4, McQuarrie.