Chem. 1460: Homework # 3 Assigned Jan 22; due Jan 31

1. Modify the 1D Ising model to calculate the average energy as well as the a average spin. For the cases of 10 and 20 spins, calculate the average spin and energy for j/kT = 0, 1, 2, 3 and plot your results. Discuss your results.

2.Starting from a random value of x (in the appropriate range) for the 1D model potential discussed in class and posted on the class web site, try to locate the local minima by means of the simulated annealing algorithm.