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Project 2
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1. Choosing the initial point for x

I chose to always start at $x = 0$. The obvious alternative is to choose a random point, but there is no obvious benefit since as the simulation continues, the simulated annealing algorithm will trend toward the minimum anyway no matter what the start point is, give or take a few iterations.

2. Picking the new point x'

Since we have no knowledge of where the minimum lies relative to the current point, we must consider stepping in both directions. Thus, my x' selection function simply chooses a random value in the range $[-1,1]$ and adds it to the current x.

3. Cooling Schedule

My cooling schedule is $T(t) = \alpha^t T_0, \alpha = 0.99995$

I did some research on common simulated annealing cooling schedules and came across the paper "A comparison of simulated annealing cooling strategies" (http://iopscience.iop.org/0305-4470/31/41/011/pdf/0305-4470_31_41_011.pdf). The exponential cooling schedule I am using is both easy to implement and "widely used." Its performance in terms of entropy is somewhere in the middle between the more complicated TDS1/2 schemes (best) and the logarithmic scheme (worst.)