

3. (a) Set temperature to 0 for the duration of the algorithm, so that probability of choosing a worse value is 0 (because this would require changing the algorithm so it does not stop at $T = 0$, an alternative is to define a different probability function so that $(\forall \Delta E < 0)P(\Delta E, T = 0)$).

(b)

Current State's Evaluation	Neighbor State's Evaluation	Temperature	Probability
16	15	20	0.95123
25	13	25	0.61878
76	75	276	0.99638
1256	1378	100	1*

*The probability function would evaluate to 3.38719 for these values, but it would be skipped because the neighboring value is greater than the current value, so the move would be taken with probability 1.