Insertion sort – algo for small number of elements

• Initialization: It is true prior to the first iteration of the loop.

• Maintenance: If it is true before an iteration of the loop, it remains true before the next iteration.

• Termination: When the loop terminates, the invariant gives us a useful property that helps show that the algorithm is correct.

We shall now make one more simplifying abstraction. It is the rate of growth, or order of growth, of the running time that really interests us. We therefore consider only the leading term of a formula (e.g., an^2), since the lower-order terms are relatively insignificant for large n.

Selection sort: find next smallest input from remaining inputs.