

The Limits of Asymptotic Complexity

- big-Oh provides a useful but big picture view
 - allows comparing algorithms rather than programs
 - can determine if an algorithm is fast enough to be practical
- big-Oh is not suitable for “which is faster?” comparisons between algorithms whose running times belong to the same growth rate class
 - specific implementation details, constant factors, and lower-order terms matter
 - ways in which real systems differ from the RAM model matter
 - actual performance depends on the specific inputs typical for the application