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## Session 2 Fundamentals

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### Lecture Summary


Instructors should not spend more than two weeks on Chapter 2. Coverage should focus on helping students tackle homework exercises and pick up the requisite terms, definitions, and skills. Later chapters will offer an opportunity for elaboration.

### Efficiency Analysis Framework

1. Analysis focus: time efficiency
2. Input size as parameter
3. Measuring algorithm run time
4. Algorithm efficiency: order of growth of run time
5. Types of efficiency analysis: worst, best, and average cases, amortized efficiency
6. A general plan for analysis

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### Session Exercise

- P4.  Code the sequential search algorithm as a function. Test using a global array.

### Exercise 2.1 • 8, 9

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### Reading List

 2.1

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### Keywords

Amortized [efficiency], efficiency, [order of] growth