



CHAPTER 18

LECTURE OUTLINE

Computer Science Illuminated, Seventh Edition

Nell Dale, PhD; John Lewis, PhD

Limitations of Computing

18.1 Hardware

- Limits on Arithmetic

- Limits on Components

- Limits on Communications

18.2 Software

- Complexity of Software

- Current Approaches to Software Quality

- Notorious Software Errors

18.3 Problems

- Comparing Algorithms

- Turing Machines

- Halting Problem

- Classification of Algorithms

Summary

Ethical Issues: Therac-25: Anatomy of a Disaster

Key Terms

Exercises

Thought Questions