



CHAPTER 9

LECTURE OUTLINE

Computer Science Illuminated, Seventh Edition

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Object-Oriented Design and High-Level Programming Languages

9.1 Object-Oriented Methodology

Object Orientation

Design Methodology

Example

9.2 Translation Process

Compilers

Interpreters

9.3 Programming Language Paradigms

Imperative Paradigm

Declarative Paradigm

9.4 Functionality in High-Level Languages

Boolean Expressions

Data Typing

Input/Output Structures

Control Structures

9.5 Functionality of Object-Oriented Languages

Encapsulation

Classes

Inheritance

Polymorphism

9.6 Comparison of Procedural and Object-Oriented Designs

Summary

Ethical Issues: Hoaxes and Scams

Key Terms

Exercises

Thought Questions