



# CHAPTER 6

## LECTURE OUTLINE

### Computer Science Illuminated, Seventh Edition

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## Low-Level Programming Languages and Pseudocode

### 6.1 Computer Operations

### 6.2 Machine Language

Pep/9: A Virtual Computer

Input and Output in Pep/9

### 6.3 A Program Example

Pep/9 Simulator

Another Machine-Language Example

### 6.4 Assembly Language

Pep/9 Assembly Language

Numeric Data, Branches, and Labels

Loops in Assembly Language

### 6.5 Expressing Algorithms

Pseudocode Functionality

Following a Pseudocode Algorithm

Writing a Pseudocode Algorithm

Translating a Pseudocode Algorithm

### 6.6 Testing

Summary

Ethical Issues: Software Piracy

Key Terms

Exercises

Thought Questions