Chapter 10. OBJECTS AND CLASSES

In this chapter you learn

- Procedural and Object-Oriented Programming
- Abstraction and Classes
- Class Constructors and Destructors
- Knowing Your Objects: The this Pointer
- An Array of Objects
- Class Scope
- An Abstract Data Type
- Summary
- Review Questions
- Programming Exercises

Object-oriented programming (OOP) is a particular conceptual approach to designing programs, and C++ has enhanced C with features that ease the way to applying that approach. The most important OOP features are these:

- Abstraction
- Encapsulation and data hiding
- Polymorphism
- Inheritance
- Reusable code

The class is the single most important C++ enhancement for implementing these features and tying them together. This chapter begins our examination of classes. It explains abstraction, encapsulation, and data hiding, and shows how classes implement these features. It discusses how to define a class, provide a class with public and private sections, and create member functions that work with the class data. Also, the chapter acquaints you with constructors and destructors, which are special member functions for