

Understanding Friends

Object-Oriented Programming
Using C++
Second Edition

Objectives

- **In this chapter, you will learn:**
- **What a friend is**
- **How to declare a friend function**
- **How to use a friend function with data from two classes**
- **How and when to use a forward reference**
- **When to use a friend function with two or more instances of the same class**
- **How to bestow friendship on functions that are members of other classes**
- **How to bestow friendship on an entire class**

What Are Friends?

- A **friend function** is a function that can access private data members of a class, even though the function itself is not a member of the class
- A **friend class** is a class whose functions can all access private data members of another class
- A friend function can access private data from a class of which it is not a member, but a friend function cannot be a friend on its own
- The friend relationship is always one-sided