

Assessments

The programming solutions for each chapters' questions can be found in our GitHub repository at the following URL: <https://github.com/PacktPublishing/Demystified-Object-Oriented-Programming-with-CPP/tree/master>. Each full program solution can be found in the GitHub under the appropriate chapter heading (subdirectory, such as `Chapter01`) in the subdirectory `Assessments`, in a file that corresponds to the chapter number, followed by a dash, followed by the solution number in the chapter at hand. For example, the solution for question 3 in chapter 1 can be found in the subdirectory `Chapter01/Assessments` in a file named `Chp1-Q3.cpp` under the aforementioned GitHub directory.

The written responses for non-programming questions can be found in the following sections. Should an exercise have a programming portion and a follow-up question, the answer to the follow-up question may be found both in the next sections and in a comment at the top of the programming solution on GitHub (as it may be appropriate to review the solution in order to fully understand the answer to the question).

Chapter 17 – Applying the Factory Pattern

1. **a – b:** Please see `Chapter17/Assessments/Chp17-Q1.cpp` in the GitHub repository.
2. Other examples which may easily incorporate the Factory Method pattern include many types of applications in which various derived classes may need to be instantiated based upon the specific values provided at construction. For example, a payroll application may require various types of `Employee` instances, such as `Manager`, `Engineer`, `Vice-President`, and so on. A factory method can provide a way to instantiate the various types of `Employee` based on the information provided when the `Employee` is hired. The Factory Method pattern is a pattern that can be applied to many types of applications.