COMP 3150

Instructions for Homework Assignment 7

FedEx offers different shipping options, each with specific costs associated. Use classes to create an inheritance hierarchy to represent various types of package shipments. Use class **Package** as the base class of the hierarchy, then include classes **TwoDayPackage** and **OvernightPackage** that derive from **Package**. Base class **Package** should include data members representing the name, address, city, state and ZIP code for both the sender and the recipient of the package, in addition to data members that store the weight (in ounces) and cost per ounce to ship the package. **Package** should provide a public member function **calculateCost** that returns a double indicating the cost associated with shipping the package. Derived class **TwoDayPackage** should inherit the functionality of base class **Package**, but also include a data member that represents a flat fee the shipping company charges for two-day-delivery service. Class **OvernightPackage** should inherit directly from class **Package** and contain an additional data member representing an additional fee per ounce charged for overnight-delivery service.

Please follow these steps to submit your work:
1. Place your name in a comment block at the top of your class definitions
2. Include comments explaining your class members
3. Create a zip file which includes all of your classes
4. Name your zip file Lastname_Homework7 and place it in your dropbox.

The assignment is due by 7 PM on April 8, 2019.