1. Complete this on your own, then review the videos and code in the class website: develop a program to compute a college dorm/meal plan cost based on user choices.
A university has the following dormitories:
Allen Hall: $1500 per semester
Pike Hall: $1600 per semester
Farthing Hall: $1200 per semester
University Suites: $1800 per semester

The university also offers the following meal plans:

7 meals per week: $560 per semester
14 meals per week: $1095 per semester
Unlimited meals: $1500 per semester

Create an application with two combo boxes. One should hold the names of the dormitories, and the other should hold the meal plans. The user should select a dormitory and a meal plan, and the application should show the total charges for the semester.

Draw class diagrams for the classes you've defined.

Draw a sequence diagram showing interactions among objects when the user chooses a new dormitory from the dormitory combo box.

2. Discuss the design choices made when implementing this project.
In particular, did you choose to have private inner classes? What differences would there have been if you had no private inner classes? Where is the work of calculating the cost done? What are the advantages and disadvantages of having a separate class do the calculation work?

3. Change the implementation in the following ways:
a) Instead of combo boxes, use menus.
b) Display the total charges in a different way from your original choice. If you originally chose to display using an uneditable text box, use a label. If you originally displayed with a label, use an uneditable text box.
c) Add mnemonics to the combo/menu choices.
d) Add a charge account to the plan and use a slider to allow the user to select the amount of money in the charge account. The range can be from $100 to $1000 per semester in increments of $50. Add the charge account amount chosen by the user in to the total charges for the semester.
e) Add service add-ons as check-boxes and include the costs of the chosen add-ons to the total charges for the semester. These might include weekly laundry service, room cleaning, drug/grocery delivery, dining club membership (for the elite on-campus student dining room). Feel free to make up your own prices and services.