| **Exercise 4.39** Implement a method in your music organizer that lets you specify a string as a parameter and then removes all tracks whose titles contain that string. |  |
| --- | --- |
| For exercises 4.40 to 4.42, use the *club* project. Your task is to complete the **Club** class, an outline of which has been provided in the project. The **Club** class is intended to store **Membership** objects in a collection. |  |
| **Exercise 4.40** Within **Club**, define a field for an **ArrayList**. Use an appropriate **import** statement for this field, and think carefully about the element type of the list. In the constructor, create the collection object and assign it to the field. Make sure that all the files in the project compile before moving on to the next exercise. |  |
| **Exercise 4.41** Complete the **numberOfMembers** method to return the current size of the collection. Until you have a method to add objects to the collection, this will always return zero, of course, but it will be ready for further testing later. |  |
| **Exercise 4.42** Membership of a club is represented by an instance of the **Membership** class. A complete version of **Membership** is already provided for you in the *club* project, and it should not need any modification. An instance contains details of a person’s name and the month and year in which they joined the club. All membership details are filled out when an instance is created. A new **Membership** object is added to a **Club** object’s collection via the **Club** object’s **join** method, which has the following description:**/\*\*****\* Add a new member to the club's collection of members.****\* @param member The member object to be added.****\*/****public void join (Membership member)**Complete the **join** method. When you wish to add a new **Membership** object to the **Club** object from the object bench, there are two ways you can do this. Either create a new **Membership** object on the object bench, call the **join** method on the **Club** object, and click on the **Membership** object to supply the parameter or call the **join** method on the **Club** object and type into the method’s parameter dialog box:**new Membership ("member name ...", month, year)**(Fadoir note: this means you need to create two **join** methods. One will take a single parameter of type **Membership** and a second **join** method which takes a **string** and two **ints**) I suggest doing the one method first, and get it working before attempting the second.)Each time you add one, use the **numberOfMembers** method to check both that the **join** method is adding to the collection and that the **numberOfMembers** method is giving the correct result.We shall continue to explore this project with some further exercises later in the chapter. |  |