

Chapter 9 includes a MagazineRack program that holds an unordered list of magazines. The program only includes an add method. We would like to modify the program to keep the magazines in the list ordered lexicographically by title. Follow the following steps to create the new program. A partial solution is provided below.

1. Modify the Magazine class to implement the Comparable interface.
2. The MagazineList class currently provides an add method to add a magazine to the list. Modify the MagazineList class to include methods to delete and insert magazines. The insert method should call the compareTo method that you defined in the Magazine class, which will decide whether one magazine title comes before another alphabetically.
3. Modify the driver class to use the insertion and deletion operations. Print the list of magazines.

```
// *****
// Magazine.java Author: Lewis/Loftus/Cocking Solution to PP 9.2
// Represents a single magazine.
// *****
public class Magazine implements Comparable
{
    private String title;

    //-----
    // Sets up the new magazine with its title.
    //-----
    public Magazine (String newTitle)
    {
        title = newTitle;
    }

    //-----
    // Returns this magazine as a string.
    //-----
    public String toString ()
    {
        return title;
    }

    //-----
    // Implementation of the Comparable class method
    //-----
    public int compareTo(Object obj)
    {
        // Code not provided
    }
}
```