/** Manuscript Class */
public class Manuscript {
    private String title;
    private String author;

    public Manuscript(String title, String author){
        this.title = title;
        this.author = author;
    }

    public String toString(){
        return "" + this.title + "\"t by " + this.author;
    }

    public boolean equals(Object obj) {
        // define 2 Manuscript objects as equal if have same title and author
        if (obj == null)
            return false;
        else if (obj.getClass() != this.getClass())
            return false;
        else {
            Manuscript mscript = (Manuscript) obj;
            return (title.equals(mscript.title) && author.equals(mscript.author));
        }
    }
}

/** Article Class */
public class Article {
    private String title;
    private String author;
    private double price;

    public Article(String title, String author, double price){
        this.title = title;
        this.author = author;
        this.price = price;
    }

    public String toString(){
        return "" + this.title + "\"t by " + this.author + "\tprice " + this.price;
    }

    // 2 Article objects are equal if they have the same title, author, & price
    public boolean equals(Object obj) {
        if (obj == null)
            return false;
        else if (obj.getClass() != this.getClass())
            return false;
        else {
            Article a = (Article) obj;
            return (title.equals(a.title) && author.equals(a.author) &&
                    this.price == a.price);
        }
    }
}
1. Specify **Article** as being a subclass of **Manuscript**.
   - Make all necessary changes to that class to take advantage of inheritance.
   - Add mutator and accessor methods to the class.

2. Create a new class called **Papers** for testing your other two classes. In its **main()** method, include the following:
   - Create and print descriptions of the following three objects:
     - a **Manuscript** object stored in a **Manuscript** type variable
     - an **Article** object stored in an **Article** type variable
     - an **Article** object stored in a **Manuscript** type variable
   - Test your **equals()** methods using the above three objects.
   - Print the total price of the last 2 objects created above.
   - Create an array to store both **Article** and **Manuscript** objects.
     - Add objects of both types to the array
     - Print the contents of the array
     - Print the total number of **Article** objects in the array