

abstract class Media implements Comparable<Media>

```
{
    protected String title;
    public String getTitle() { return title; }

    /**
     * This will override the previous compareTo method from the Comparable interface.
     * The idea is to have the compareTo String method compare two instances of Media. If return
     * is negative, then higher on the sort order. If 0, then equal priority. If positive, then lower prior.
     * Books and DVD's have different ways of comparison (DVDs having higher priority)-
     * DVDS: compares by title initially. If titles are the same then compare by year
     * Books: also compares by title initially. If same titles, then compare by author
     */

    @Override
    public int compareTo(Media media) {
        if(this instanceof DVD) {
            if(media instanceof DVD) {
                DVD thisMedia = (DVD) this;
                DVD compareMedia = (DVD) media;
                if ((thisMedia.getTitle()).compareTo(compareMedia.getTitle()) == 0)
                    return thisMedia.getYear() - compareMedia.getYear();
                else if((thisMedia.getTitle()).compareTo(compareMedia.getTitle()) > 0)
                    return 1;
                else
                    return -1;
            }
            else
                return -1;
        }
        else if(this instanceof Book) {
            if(media instanceof Book) {
                Book book = (Book) this;
                Book otherbook = (Book) media;
                if((book.getTitle()).compareTo(otherbook.getTitle()) == 0)
                    return (book.getAuthor()).compareTo(otherbook.getAuthor());
                else if((book.getTitle()).compareTo(otherbook.getTitle()) < 0)
                    return -1;
                else
                    return 1;
            }
            else
                return 1;
        }
        else
            return 1;
    }
}
```

```
class Book extends Media
{
    private String author;
    public Book(String title, String author)
    {
        this.title = title;
        this.author = author;
    }
    public String getAuthor() { return author; }
    public String toString()
    {
        return getTitle() + " by " + getAuthor();
    }
}
```

```
class DVD extends Media
{
    private int year;
    public DVD(String title, int year)
    {
        this.title = title;
        this.year = year;
    }
    public int getYear()    { return year; }
    public String toString()
    {
        return year + ": " + title + " [DVD]";
    }
}
```

```
Terminal
File Edit View Terminal Tabs Help
1999: Dare to go Solo [DVD]
2000: Dare to go Solo [DVD]
2006: Dare to go Solo [DVD]
2012: Dare to go Solo [DVD]
1970: Intro to Programming [DVD]
2011: Intro to Programming [DVD]
Dare to go Solo by Elizabeth Boese
Dare to go Solo by Wise Travelguy
Intro to Programming with Java Applets by Elizabeth Boe
Intro to Programming with Java Applets by Elizabeth Boese

-----
(program exited with code: 0)
Press return to continue
█
```