Junior Knights OOP Homework Assignment: Net-Flicks

Problem Statement

Write a Movie class that manages information about a movie. After you have written your Movie class, you will write a separate class that will utilize Movie objects.

Here are the instance variables for your Movie class:

```
private String title;
private double ticketPrice;
private double numViewers;
private double grossRevenue;
```

The methods your Movie class must have are:

```
// Creates an new Movie object that has never been seen,
// with an original ticket price of price.
public Movie(String movieTitle, double price);
// Returns the title of the current object.
public String getTitle();
// Returns the ticket price of the current object.
public double getTicketPrice();
// Returns the total number of viewers for the current
// object.
public int getNumViewers();
// Returns the gross revenue of the current object.
public double getGrossRevenue();
// Sells numTickets number of tickets for the current
// Movie object. If numTickets is negative, no tickets
// are sold.
public void sellTickets(int numTickets);
// Gives away numTickets number of tickets away for free
// for the current Movie object. If numTickets is
// negative, no tickets are given away.
public void giveFreeTickets(int numTickets);
```

```
// Returns true iff the gross revenue of the current
// object exceeds $100,000,000.
public boolean bigHit();
// Creates a new Movie object with the same title as the
// original with "Dos" concatenated to the end of it. The
// ticket price will be one dollar less than that of the
// current Movie object.
public Movie makeSequel();
// Increases the price a ticket to the current Movie object
// by increase number of dollars. If increase is negative,
// no change is made to the ticket price.
public void upTicketPrice(double increase);
// Sets the price of a ticket to the current Movie object
// to one dollar.
public void moveToDollarTheater();
// Returns a string representation of the current object.
// In a reasonable fashion, this includes the title,
// total number of viewers and gross revenue.
public String toString();
// Returns a negative integer if the current movie object
// has a smaller gross revenue than m, returns 0 if its
// revenue is equal to m's revenue, and returns a positive
// integer if its revenue is greater than m's.
public int compareTo(Movie m);
```

Testing

To test your movie class, we've written a program called movieApp.java. This program reads in information from a file, creates movie objects, will call your movie methods and calculate various statistics about some movies. To see if you've written your methods correctly, just compile and run movieApp.java and see if your output matches the desired posted output. There are two pairs of input/output files:

movie1.txt, movie1.out
movit2.txt, movie2.out

So that you understand the general format of these input files, you will have access to the assignment movieApp (but will not have to write that class, since we've given it to you.)