



Comp 130 – Introduction to Programming (Java)

Question: Movie

In this program, there are two classes Movie.java and TestMovie.java.

TestMovie.java: This class will be used for test purposes with a menu that shows action list. You must not change anything from this class. TestMovie class reads movies from “movies.txt” file and uses Movie objects to hold and use the movie information. Therefore, it is important to have a proper Movie class.

Movie.java: Movie class is used to create a Movie object that has name, year, rating and cast members.

You should implement the following ones in Movie.java;

1-) constructor: It should set movie name, year, rating and cast.

2-) get methods: The get methods for movie name, year, rating, cast and review.

3-) getReview: This method should return a review according to rating of the movie. Scale is given below;

[9-10] → return Excellent

[7-9] → return Good

[5-7] → return Average

[3-5] → return Below Average

[0-3] → return Poor

Other values → return N/A

4-) inCast: Cast members are in an ArrayList<String> cast. In this method, you should search ArrayList for a given name. If there is a cast member who has the given name, the method should return **true**, otherwise, it should return **false**.

An example run given below. (Shorter version of the actual program!!)

Menu:

1 - Display all movies.

2 - Display movies that have rating equal or greater than a given rating.

3 - Display movies of an actor/actress.

0 - Exit.

Enter an option: 1

---Movie List---

Movie: The Shawshank Redemption

Year: 1994

Rating: 9.3/10

Review: Excellent

Cast: Tim Robbins, Morgan Freeman

Movie: The Godfather

Year: 1972

Rating: 9.2/10

Review: Excellent

Cast: Marlon Brando, Al Pacino

Movie: The Matrix

Year: 1999

Rating: 8.7/10

Review: Good

Cast: Keanu Reeves, Laurence Fishburne, Carrie-Anne Moss

Movie: Gladiator

Year: 2000

Rating: 8.5/10

Review: Good

Cast: Russell Crowe, Joaquin Phoenix

Movie: Eskiya

Year: 1996

Rating: 8.3/10

Review: Good

Cast: Sener Sen, Ugur Yucel

Movie: A Beautiful Mind

Year: 2001

Rating: 8.0/10

Review: Good

Cast: Russell Crowe, Ed Harris, Jennifer Connelly

Movie: Iron Man

Year: 2008

Rating: 7.9/10

Review: Good

Cast: Robert Downey Jr., Terrence Howard, Gwyneth Paltrow

Movie: The Notebook

Year: 2004

Rating: 7.9/10

Review: Good

Cast: Rachel McAdams, Ryan Gosling

Movie: Sherlock Holmes

Year: 2009

Rating: 7.6/10

Review: Good

Cast: Robert Downey Jr., Jude Law, Rachel McAdams

Menu:

1 - Display all movies.

2 - Display movies that have rating equal or greater than a given rating.

3 - Display movies of an actor/actress.

0 - Exit.

Enter an option: 2

Enter a rating: 8.7

---Movies equal or greater than 8.7 rating---

Movie: The Shawshank Redemption

Year: 1994

Rating: 9.3/10

Review: Excellent

Cast: Tim Robbins, Morgan Freeman

Movie: The Godfather

Year: 1972

Rating: 9.2/10

Review: Excellent

Cast: Marlon Brando, Al Pacino

Movie: The Matrix

Year: 1999

Rating: 8.7/10

Review: Good

Cast: Keanu Reeves, Laurence Fishburne, Carrie-Anne Moss

Menu:

- 1 - Display all movies.
- 2 - Display movies that have rating equal or greater than a given rating.
- 3 - Display movies of an actor/actress.
- 0 - Exit.

Enter an option: 3

Enter a name: Robert Downey Jr.

---Movies of Robert Downey Jr.---

Movie: Iron Man

Year: 2008

Rating: 7.9/10

Review: Good

Cast: Robert Downey Jr., Terrence Howard, Gwyneth Paltrow

Movie: Sherlock Holmes

Year: 2009

Rating: 7.6/10

Review: Good

Cast: Robert Downey Jr., Jude Law, Rachel McAdams

Menu:

- 1 - Display all movies.
- 2 - Display movies that have rating equal or greater than a given rating.
- 3 - Display movies of an actor/actress.
- 0 - Exit.

Enter an option: 0