Target assessment level

Target assessment level of this work is 3.

Specification

What does the program do?

The program

1. Reads the movie data from a specified text file.
2. Takes the top 10 rated movies from highest to lowest rating.
3. Calculates the average rating of those movies.
4. Prints both the top 10 rated movies and the average rating of them on consecutive lines except the average rating which is printed after a space.

The user supplies the name of the input text file from keyboard.

Data format

The input data text file consists of lines, each line containing

Title | Director | Year | Rating

- Title is as one or more words.
- Director is as one or more words.
- Year is as an integer.
- Rating is as a float.

Correctness

Typical test case

File movies.txt contains 10 movies, its directors, year of releases and rating it received. When the program (file MovieRatingAnalyser.py) is run, the output is correct with each movie and its info printed on consecutive lines going from highest to lowest rating as well as the average rating of all the movies:

```
Top 10 Rated Movies:

The Shawshank Redemption (1994) - Directed by Frank Darabont, Rating: 9.3/10

The Dark Knight (2008) - Directed by Christopher Nolan, Rating: 9.0/10

Pulp Fiction (1994) - Directed by Quentin Tarantino, Rating: 8.9/10
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Schindler's List (1993) - Directed by Steven Spielberg, Rating: 8.9/10

Forrest Gump (1994) - Directed by Robert Zemeckis, Rating: 8.8/10

Inception (2010) - Directed by Christopher Nolan, Rating: 8.8/10

Fight Club (1999) - Directed by David Fincher, Rating: 8.8/10

The Matrix (1999) - Directed by Lana Wachowski, Rating: 8.7/10

Goodfellas (1990) - Directed by Martin Scorsese, Rating: 8.7/10

Interstellar (2014) - Directed by Christopher Nolan, Rating: 8.6/10

Average rating of all the movies: 8.85/10

Resource management (level 2)

This input file is open using a with-statement and will therefore be closed automatically.