On IMDb, a user rating is listed next to the title of every movie in the database. The rating is given on a scale of 0 to 10. For instance, the movie 'Good Will Hunting' (1997) has a rating of 8.3/10 based on votes from 732,710 users. This rating provides a measure of the movie's perceived quality.

In this context, explore the application of the mean (specifically, the arithmetic mean) in determining the ranking of movies on IMDb by following these tasks:

1. Select a movie of your choice (for example, your favorite) and look it up on IMDb.
2. Create a frequency distribution in a tool like Excel to record the ratings given by users. Confirm the calculation of the arithmetic mean as mentioned below the frequency distribution on IMDb. (Note: The actual average rating and the arithmetic mean might not always match. A brief explanation is provided.)
3. Analyze the frequency distribution of the ratings for your chosen movie and consider whether the Arithmetic Mean is a suitable measure for representing the overall rating. Provide your reasoning.

Furthermore, take a look at "Les Misérables" (1935 and 2012), an original movie and its remake. Choose a remake according to your preference. Compare the distribution of votes (ratings) for the original and the remake. Calculate either the Arithmetic Mean or the Median (whichever is the standard) for both versions. Highlight the distinctions between the two rating distributions, utilizing the calculated measures, and propose reasons for the observed differences

Solution :

* I have considered to movies “Kabir Singh” and “Arjun Reddy”.
* For ratings I have considered rating of only Indian audience.
* Then I made a excel sheet having Rating and frequency as two column and Actual rating is stored in Labels.
* I calculated mean and median and in both case Arithmetic mean was found to be more close to the actual rating with a difference of 0.1-0.2 .
* Note : Since IMDB provided only approximate no of votes the exact rating differed from my findings.
* On comparison of the two movies we found that:
* No. of voters of Kabir singh was more
* Rating of Arjun reddy was more
* This could be because Kabir Singh was released in hindi hence gathering more audience.
* But Arjun Reddy affected the gathered audience more positively than Kabir Singh.