**Dataset -** <https://www.imdb.com/interfaces/>

(Dataset can be changed by IMDB, always refer the fields acquired during learning)

1. **Import Libraries/Dataset**
2. Download the dataset
3. Import the required libraries
4. **Data Visualization and Exploration**
5. Print at least 5 rows for sanity check to identify all the features present in the dataset and if the target matches with them.
6. Print the description and shape of the dataset.
7. Provide appropriate visualization to get an insight about the dataset.
8. Try exploring the data and see what insights can be drawn from the dataset.

* Analyze how title length affects the ratings.
* Determine which language artifacts has higher rating
* Identify the best directors and writers with highest ratings.
* Identify the region with the best ratings
* Analyze how the title length varied with years
* Identify the best crew that gave the best of releases.
* Which type of genre attracts more users. Analyze the genre that was most popular.

1. **Data Pre-processing and cleaning**
2. Do the appropriate preprocessing of the data like identifying NULL or Missing Values if any, handling of outliers if present in the dataset, skewed data etc. Apply appropriate feature engineering techniques for them.
3. Apply the feature transformation techniques like Standardization, Normalization, etc. You are free to apply the appropriate transformations depending upon the structure and the complexity of your dataset.
4. Do the correlational analysis on the dataset. Provide a visualization for the same.
5. **Data Preparation**
6. Do the final feature selection and extract them into Column X and the class label into Column into Y.
7. Split the dataset into training and test sets.
8. **Model Building**
9. Perform Model Development using at least three models, separately.
10. Train the model and print the training accuracy and loss values.
11. **Performance Evaluation**
12. Print the confusion matrix. Provide appropriate analysis for the same.
13. Do the prediction for the test data and display the results for the inference.