> SCRAPING DATA

[] → 4 cells hidden

> PREPROCESSING DATA

[] → 35 cells hidden

> LABELLING DATA LEXICON BASED

[] → 7 cells hidden

> MODEL ALGORITMA SUPPORT VECTOR MACHINE

[] → 18 cells hidden

> WORDCLOUD

▶ 6 cells hidden

~ RATING

```
import pandas as pd
data = pd.read_csv('Hasil_Labelling_Data.csv')
data.info()
    <class 'pandas.core.frame.DataFrame'>
     RangeIndex: 854 entries, 0 to 853
     Data columns (total 11 columns):
     # Column
                          Non-Null Count Dtype
     0 Date
                          854 non-null
                                          object
     1
         Username
                          854 non-null
                                          object
      2 Rating
                         854 non-null
         Review Text
                          854 non-null
                                          object
     4 cleaning
                          854 non-null
                                          object
     5 case folding
                          854 non-null
                                          object
      6 normalisasi
                           854 non-null
                                          object
                           854 non-null
         tokenize
                                          object
      8 stopword removal 854 non-null
                                          object
         steming_data
                           854 non-null
     10 Sentiment
                           854 non-null
                                          object
     dtypes: int64(1), object(10)
     memory usage: 73.5+ KB
import matplotlib.pyplot as plt
rating_counts = data['Rating'].value_counts()
rating_counts = rating_counts.sort_index()
colors = ['red', 'lightcoral', 'lightgreen', 'lightsalmon', 'lightblue']
plt.figure(figsize=(8,6))
bars = plt.bar(rating_counts.index, rating_counts.values, color=colors)
plt.title('Jumlah Rating', fontsize=14, fontweight='bold')
plt.xlabel('Rating/Score')
plt.ylabel('Jumlah')
plt.xticks(rating_counts.index)
for bar in bars:
 height = bar.get_height()
  plt.text(bar.get_x() + bar.get_width() / 2, height, str(int(height)), ha='center', va='bottom')
```

plt. show()



