## Here movies = DataSet imported to python in CSV format (movies.csv)

## movies = pd.read\_csv('movies.csv')

## 'CriticRatings' & 'AudienceRatings' are column names of movies.csv file

**Required Libraries:**

MatPlotLib

Pandas

Seaborn

***import*** *matplotlib.pyplot* ***as*** *plt*

***import*** *pandas* ***as*** *pd*

***import*** *seaborn* ***as*** *sns*

**JOINT PLOT: (Both X and Y axis has Numeric Data)**

j = sns.jointplot(data = movies, x = 'CriticRatings', y = 'AudienceRatings')

**HISTOGRAM:**

**HIST PLOT: (Single Axis Based on Single Dimensional Data)**

pyPlot = plt.hist(movies.CriticRatings, bins =15)

seabornPlot2 = sns.distplot(movies.AudienceRatings, bins =15)

**Histogram Types: Hist, Box, Violin, Dist**

**BOX PLOT (Category/ Numeric Value = X / Y Axis)**

boxPlot1 = sns.boxenplot(data=movies, x='Genre', y='CriticRatings')

**VIOLIN PLOT (Category/ Numeric Value = X / Y Axis)**

Category/ Numeric Value = X and Y Axis

violinPlot1 = sns.violinplot(data=movies, x='Genre', y='CriticRatings', ax=axes[1])

**DIST PLOT (Single Axis Based on Single Dimensional Data)**

sns.set\_style("darkgrid")

seabornPlot = sns.distplot(movies.CriticRatings, bins =15)

**Difference between BOX & VIOLIN PLOT:**

Violin plot is more detailed & it gives more insights. It is more for Technical people.

BOXPlot is liked by business people much as they tend to understand simpler visualization.

**SCATTERED PLOT (Both X and Y Axis has Numeric values):**

scatteredPlot = plt.scatter(movies.CriticRatings, movies.AudienceRatings)

**SUBPLOT :: KDE PLOT (Kernel Density Estimation)**

kdeplotAudienceRatingsVSBudget = sns.kdeplot(movies.Budget, movies.AudienceRatings, size = 10)

**LMPLOT: (Both X and Y Axis has Numeric values)**

vis1 = sns.lmplot(data=movies, x='CriticRatings', y='AudienceRatings', size=7, hue='Genre', fit\_reg=False, aspect=1)

**FACETGRID: (Plot within plot) ~ scattered plot within FacetGrid**

**Syntax:**

FacetGrid: X axis v/s Y axis: Category v/s Category

ScatteredPlot: X axis v/s Y Axis: Category v/s Number

*Note: FACETGRID both X and Y axis have CATEGORICAL values*

**Syntax:**

facetGrid1 = sns.FacetGrid(movies, hue='Genre', row ='Genre', col='ReleaseYear')

facetGrid2 = facetGrid2.map(plt.scatter, 'CriticRatings', 'AudienceRatings')

**HISTOGRAM WITHIN FACETGRID:**

facetGrid3 = sns.FacetGrid(movies, hue='Genre', row ='Genre', col='ReleaseYear')

facetGrid3 = facetGrid3.map(plt.hist, 'Budget', bins = 10)