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SOC\_2

COURSE:ADVANCED PYTHON

**NOTES:TOPICS COVERED**

#Distplot()

-> A **Distplot** or distribution plot, depicts the variation in the data distribution.

->Seaborn Distplot represents the overall distribution of continuous data variables.

->The Seaborn module along with the Matplotlib module is used to depict the distplot with different variations in it.

->The Distplot depicts the data by a histogram and a line in combination to it.

🡪It will take only one column

🡪By default kde is true

#jointplot()

->The joint plot is a way of understanding the relationship between two variables and the distribution of individuals of each variable.

->The joint plot mainly consists of three separate plots in which, one of it was the middle figure that is used to see the relationship between x and y.

->So, this area will give the information about the joint distribution, while the remaining two areas will provide us with the marginal distribution for the x-axis and y-axis.

🡪we can unable to 2 diff columns

**Syntax:**

seaborn.jointplot(x, y, data=None, kind='scatter', stat\_func=None, color=None, height=5, ratio=3.)

#Logistic regression

🡪it is a statistical method used to model the relationship b/w a binary dependent variable and one at more independent variables

🡪dependent variable-0 &1

🡪in logistic regression,the dependent variable is binary,meaning it can only take on two values,labelled as 0 0r 1

🡪the independent variables can be either continuous or catagorical

#from sklearn.metrics

# import accuracy\_score,precision\_score,recall\_score,f1\_score,confusion\_matrix

#Accuracy

🡪Accuracy means the percentage of correctly classified

instances out of all instances

#precision

🡪It measures the proportion of true positive prediction out of all positive Predictions

#recall

🡪recall=true pos/actual pos

🡪It measures the proportion of true positive prediction out of all actual positive cases.

#Confusion Matrix

🡪It is a table that gives the performance of a classfication model

🡪It shows true pos,true neg,false pos,false neg

🡪It is the mean of precision and recall

#Logistic regression

🡪From sklearn.datasets import load\_iris

🡪From sklearn.linear\_model import LogisticRegression

🡪From sklearn.metrics import accuracy\_score

#from sklearn.model\_selection import train\_test\_split

#Seperate dependent variable and independent variable

#To train the algorithm