Data Utsualization using matphotus (Day-4) (Limatphotilo, is a powerful, plotting library for python l'action bhat enables the creation of static, animated, and înteractive Udvalization! # 1. pip install matplotly bours \* import matplottib Puplot as plt \*\* × = [1,2,3,4,5] ( 4= [44,9,76,25] pit-plot (x, 4) then the post cosu be created of we want to add the tabels ple. plabel ('x apis') put · y label ('y axis') pro. title ("Barre. Line plot") pit. show()

\* Create a Customized line plot x = [1,2,3,4,5]y=[1,4,9,16,25] [1,0,2.6,2] PIE. plot ( ( ) Y 1 Color = 1 red 1, linestyle = 1 - 1) result marker = ( o / | Grewidth = 3, marksie=9) ( alrepose) / lade v. 389 plt.grid (True) ( 'water ) littly . High \* Hulker Dots: Mr. Fills (1 204 Blot) X = [1,2,3,4,5] 1) well-till 4, = [1,4,9,16,25] 12 = (1,213,415) trooppr of bed no part 1 Pit figure (figsize = (9/5)) mich de leite र्स निकार तो स्तारेग Plt. p1 Subplot (2,2,1) ple plot (exivi (color = ) green!) Elevel (1211) = oxob Pite. title ("plot"). . . sprend" = roled , podeta) & eid . +199 PIT-Supplot (21212) pit . plot ( #11 x , Color - "red") bit. Hite ( a biotzi,) PIF·Subplot (21213) PIt. Plot ( X1421 Color = (blue))

DIT. HH. ( 4 Plot #)

they will bellington to seems ex Create a bar Graph Categories = [(A1, 1B1, (c1, 101, (e1)) Categories, Color = purple') and the Plt. xlabel ('Categories') (301 ) Hap. 119 Pit. ylabel ( "lalus") Literay algarent Plt. title (1 Bor plot) Leivisisii) -x Plt-Show () 135, dr. PhD. 17 = , W Histograms !-Ly They are used to represent the distribution of a detaset, - They divide the data (into time like Count to nory data points in each tra data = (1,2,2,3,3,4,4,4,4,4,5) +0,5,5) +0,0,0,0,0 Pit-hist (data, color = "Orange", edgécolor = ublack Fit) (1212) takying, for ("bur" = relading rough ) tolq , sig. Charlest of all of CERT 1 400 poly 12 . 119

into a pales of Asserting Colonies . Then to \* Creak a scatter plot x= [1,2,3,4,5] ( hook of the color of soil ) soil 4= [213,415,6] PIt · Scatter ( b, 4, color & hibling indices = (n) with some traces what they to of chart a ple chart Tabels = "CiA' (17.8). The Did strate also 8126 = ( 30,20, 40,10). Colors = ['gold', 'yellowgreen', 'llight Coral', 'light styken!]

(['strong inform') brook which ('s 100') brook which days are

exprised = (0.2,0,0,0) PIt-pie (Sizes, explode = explode, label = labels, colors = colors, autopet = " %1,1 f% %", 5 === Shadow = True) \* Sales Data Vivalization import pandas as pd Sales-data-df = pd. read-csu ('Alerane-csv) Sales - data -df. head (5) sales \_data -df. infol)

- sales - data df for grouply Landor coly total - sales by -product Ctrotal Pavanes 1) · Barne Pront (total -sales - by - product) [ 3 6 1 N. 2 16 ] - 0 -botal-sales - by - product regalot ( Kind = 'ban') Color = 'teal) of plot Sales trend Over Hm. draft old a die Sales \_trend = Sales - data df groupby (1 Data!) ('Total Buen . som (1' Freset Jinker 1) Pit-plot (Sales\_trend E'Date'), Sales\_trend ('Trotal Ruenes)) ( cistor, ciolo), unio relation, shorting a shorting passing) sin 117 Carine a company excitorite suits of all silv by so what impli (1800 hours 1911) her har they a let ontak - 1817 (2) hoper, the other 2010