**Assignment No: 5**

# Name: Ajay shinde

Prn : 20220105003

BATCH G3

ROLL NO. 758

**Select any one real-life** [**dataset.**](http://moodle.mitaoe.ac.in/mod/url/view.php?id=62106) **Perform data analysis. Identify 10 grains for a given** [**dataset.**](http://moodle.mitaoe.ac.in/mod/url/view.php?id=62106) **Develop an interactive dashboard using the matplotlib/Seaborn library.**

**Code :**

|  |
| --- |
| import pandas as pd import numpy as np import matplotlib.pyplot as plt import seaborn as sns  data=pd.read\_csv("/content/sample\_data/Batting data set.csv",encoding=  'unicode\_escape')  #print("all data:-\n",data) df=pd.DataFrame(data)    #Line chart of Country VS Matches Played data=data.sort\_values(by='Matches Played') mat\_x=data['Matches Played'] con\_y=data['Country'] plt.plot(mat\_x,con\_y) plt.title('Country VS Matches Played')  plt.xlabel('Most player played matches from those countries') plt.ylabel('Country') plt.show()    #line chart of Country VS Fifites data=data.sort\_values(by='Fifties') fif\_x=data['Fifties'] con\_y=data['Country'] plt.plot(fif\_x,con\_y) plt.title('Country VS Fifites')  plt.xlabel('Most player Did their fifites from those country') plt.ylabel('Country') plt.show()    #line chart of Country VS Centuries |

|  |
| --- |
| data=data.sort\_values(by='Centuries') cen\_x=data['Centuries'] con\_y=data['Country'] plt.plot(cen\_x,con\_y) plt.title('Country VS Centuries') plt.xlabel('Most player Did their Centuries from those country') plt.ylabel('Country') plt.show()  #Bar Plot of Centuries VS Matches Played cen\_x = data['Centuries'] mat\_y = data['Matches Played']  plt.bar(cen\_x,mat\_y) plt.title("Bar Plot of Centuries VS Matches Played") plt.xlabel("Centuries") plt.ylabel("Match") plt.show()    #Bar Plot of Half-Centures VS Matches Played fif\_x=data['Fifties'] mat\_y=data['Matches Played']  plt.bar(fif\_x,mat\_y) plt.title("Bar Plot of Half-Centures VS Matches Played") plt.xlabel("Half-Centuries") plt.ylabel("Match") plt.show()    #Bar plot of Country VS Matches Played con\_x=data['Country'] mat\_y=data['Matches Played'] plt.barh(con\_x,mat\_y)  plt.title("Bar plot of Country VS Matches Played") plt.xlabel('Most matches Played by player') plt.ylabel('Country') plt.show()    #Histogram of Debut Year  deb\_his=data['Debut Year'] plt.hist(deb\_his,bins=6,edgecolor='black') plt.xlabel('Debut Year') plt.ylabel('Frequency Of Player') plt.title('Histogram of Debut Year') plt.show()    #Histogram of Upto Year Played |
| up\_his=data['Upto year played'] plt.hist(up\_his,bins=5,edgecolor='black') plt.xlabel('Upto year played') plt.ylabel('Frequency Of Player') plt.title('Histogram Of Upto Year Played') plt.show()    #Histogram of Highest Score  hig\_his=data['Highest Score'] plt.hist(hig\_his,bins=6,edgecolor='black') plt.xlabel('Highest Score') plt.ylabel('Frequency of Player who do higest score') plt.title('Histogram of Highest Score') plt.show()    #Density Plot of Batting Average Bat\_avg=data['Batting Average'] dens1=np.random.normal(Bat\_avg) plt.hist(dens1,density=True,bins=10,alpha=0.5) plt.xlabel('Batting Average') plt.ylabel('Density') plt.title('Batting Average of player') plt.show()    #Density plot of Runs Scored run=data['Runs Scored'] dens2=np.random.normal(run) plt.hist(dens2,density=True,bins=10,alpha=0.5) plt.xlabel('Batting Average') plt.ylabel('Density') plt.title('Runs Scored By player') plt.show()    #Density plot of Not Outs not\_out=data['Not Outs'] dens3=np.random.normal(not\_out)  plt.hist(dens3,density=True,bins=10,alpha=0.5) plt.xlabel('Not Outs') plt.ylabel('Density') plt.title('Player are Not Out in Test matches') plt.show() |

Output:

