

# MACHINE LEARNING USING PYTHON END TERM PRAC EXAM-:

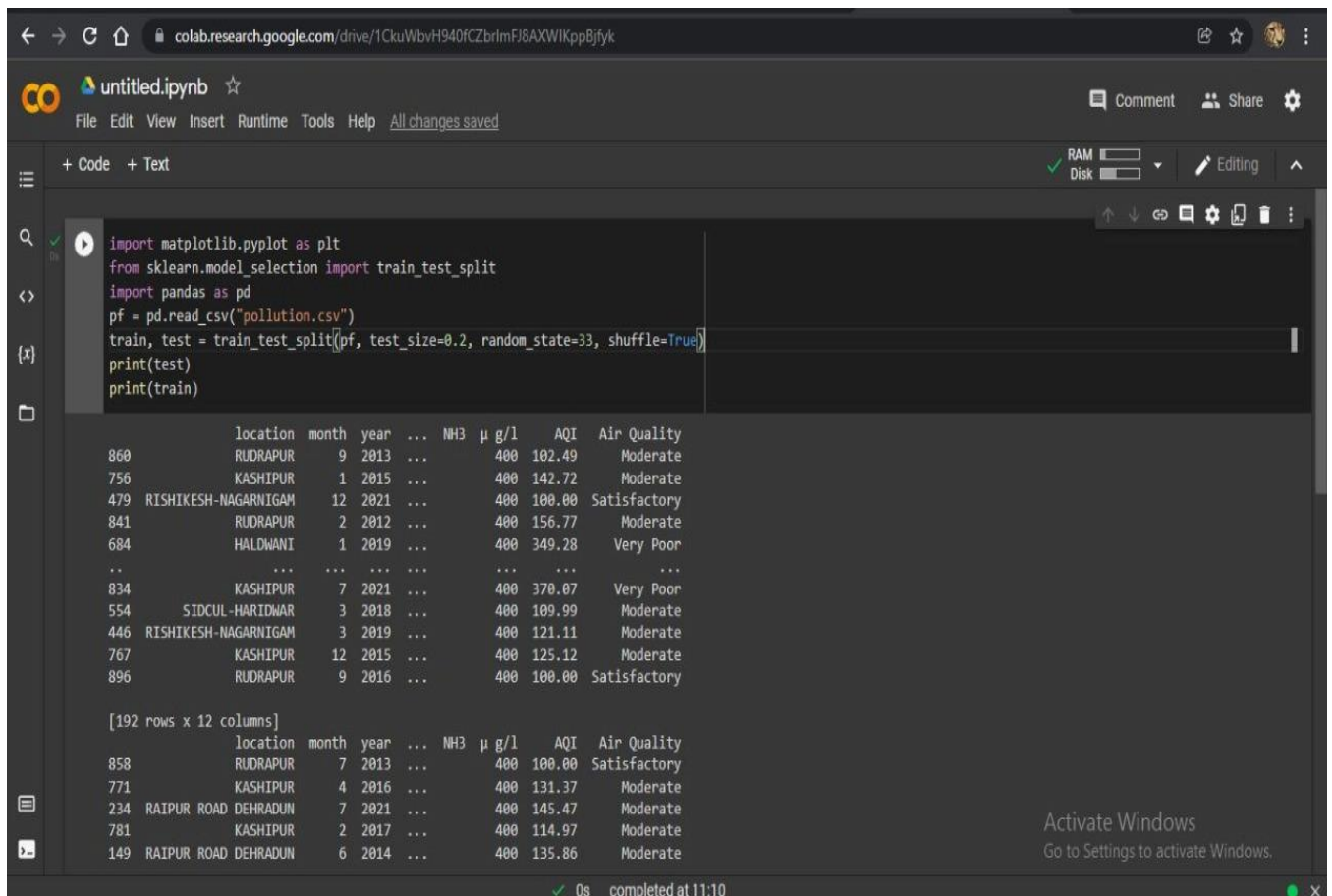
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SEM-3C

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ROLL-NO-2001182



The screenshot shows a Google Colab notebook interface. The top bar includes the Google Colab logo, the notebook name 'untitled.ipynb', and navigation icons. Below the top bar is a menu bar with 'File', 'Edit', 'View', 'Insert', 'Runtime', 'Tools', and 'Help'. The main area is divided into a code editor and a preview area. The code editor contains the following Python code:

```
import matplotlib.pyplot as plt
from sklearn.model_selection import train_test_split
import pandas as pd
pf = pd.read_csv("pollution.csv")
train, test = train_test_split(pf, test_size=0.2, random_state=33, shuffle=True)
print(test)
print(train)
```

The preview area displays a table of data with 12 columns: 'location', 'month', 'year', 'NH3', 'μ g/l', 'AQI', and 'Air Quality'. The table shows 192 rows of data, with the first 10 rows visible. The data is as follows:

	location	month	year	NH3	μ g/l	AQI	Air Quality
860	RUDRAPUR	9	2013	...	400	102.49	Moderate
756	KASHIPUR	1	2015	...	400	142.72	Moderate
479	RISHIKESH-NAGARNIGAM	12	2021	...	400	100.00	Satisfactory
841	RUDRAPUR	2	2012	...	400	156.77	Moderate
684	HALDWANI	1	2019	...	400	349.28	Very Poor
...	...	...	...	...	...	...	...
834	KASHIPUR	7	2021	...	400	370.07	Very Poor
554	SIDCUL-HARIDWAR	3	2018	...	400	109.99	Moderate
446	RISHIKESH-NAGARNIGAM	3	2019	...	400	121.11	Moderate
767	KASHIPUR	12	2015	...	400	125.12	Moderate
896	RUDRAPUR	9	2016	...	400	100.00	Satisfactory

Below the table, it says '[192 rows x 12 columns]'. The bottom of the notebook shows a status bar with '0s completed at 11:10' and a Windows watermark.

colab.research.google.com/drive/1CkuWbvH940fCZbrImFJ8AXWIKpp8jfyk

Untitled1.ipynb

File Edit View Insert Runtime Tools Help All changes saved

+ Code + Text

RAM Disk

Editing

import pandas as pd

import matplotlib.pyplot as plt

df = pd.read\_csv("pollution.csv")

print(df)

aqi = df["AQI"]


aqi.plot(kind='hist')

df.plot(x="year", y="AQI", kind="scatter")

	location	month	year	...	NH3	μg/l	AQI	Air Quality
0	CLOCK TOWER-DEHRADUN	1	2012	...	400	162.19	Moderate	
1	CLOCK TOWER-DEHRADUN	2	2012	...	400	149.18	Moderate	
2	CLOCK TOWER-DEHRADUN	3	2012	...	400	174.23	Moderate	
3	CLOCK TOWER-DEHRADUN	4	2012	...	400	187.17	Moderate	
4	CLOCK TOWER-DEHRADUN	5	2012	...	400	260.73	Poor	
...	...	...	...	...	...	...	...	...
955	RUDRAPUR	8	2021	...	400	368.03	Very Poor	
956	RUDRAPUR	9	2021	...	400	325.96	Very Poor	
957	RUDRAPUR	10	2021	...	400	100.00	Satisfactory	
958	RUDRAPUR	11	2021	...	400	100.00	Satisfactory	
959	RUDRAPUR	12	2021	...	400	100.00	Satisfactory	

[960 rows x 12 columns]

<matplotlib.axes.\_subplots.AxesSubplot at 0x7f1607854d50>



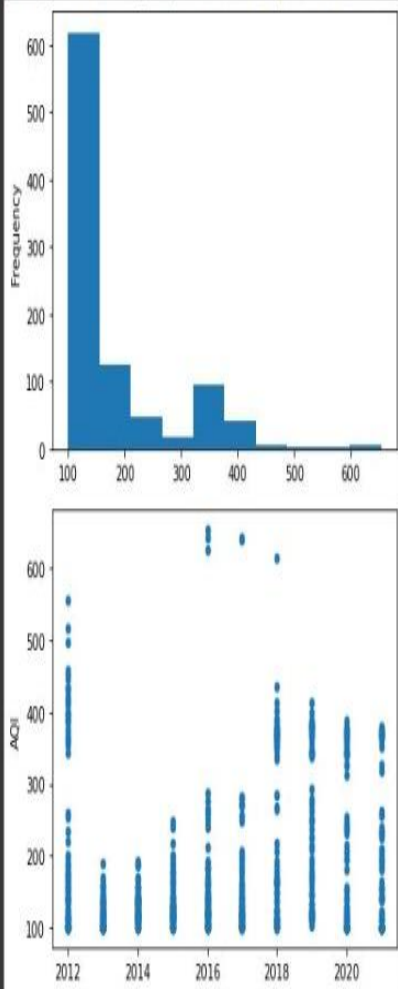
Activate Windows  
Go to Settings to activate Windows.

1s completed at 10:58

+ Code + Text

RAM Disk Editing

[960 rows x 12 columns]  
<matplotlib.axes.\_subplots.AxesSubplot at 0x7f1607854d50>



Activate Windows  
Go to Settings to activate Windows.

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