

A 8 PCA wine.pdf

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A 8 PCA

In [1]:

```
# Import Libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
from sklearn.decomposition import PCA
from sklearn.preprocessing import scale
```

In [2]:

```
# Import Dataset
wine=pd.read_csv('C:/Users/Hp/Downloads/wine.csv')
wine
```

Out[2]:

	Type	Alcohol	Malic	Ash	Alcalinity	Magnesium	P
0	1	14.23	1.71	2.43	15.6	127	
1	1	13.20	1.78	2.14	11.2	100	
2	1	13.16	2.36	2.67	18.6	101	
3	1	14.37	1.95	2.50	16.8	113	
4	1	13.24	2.59	2.87	21.0	118	
...
173	3	13.71	5.65	2.45	20.5	95	
174	3	13.40	3.91	2.48	23.0	102	
175	3	13.27	4.28	2.26	20.0	120	
176	3	13.17	2.59	2.37	20.0	120	
177	3	14.13	4.10	2.74	24.5	96	

178 rows × 14 columns

In [3]:

```
wine['Type'].value_counts()
```

Out[3]:

```
2    71
1    59
3    48
```

Name: Type, dtype: int64