APPLICATION PROGRAMMING

PYTHON

INTRODUCTION

'DATA ANALYSIS OF

MANUFACTURING ENTERPRISE USING PYTHON

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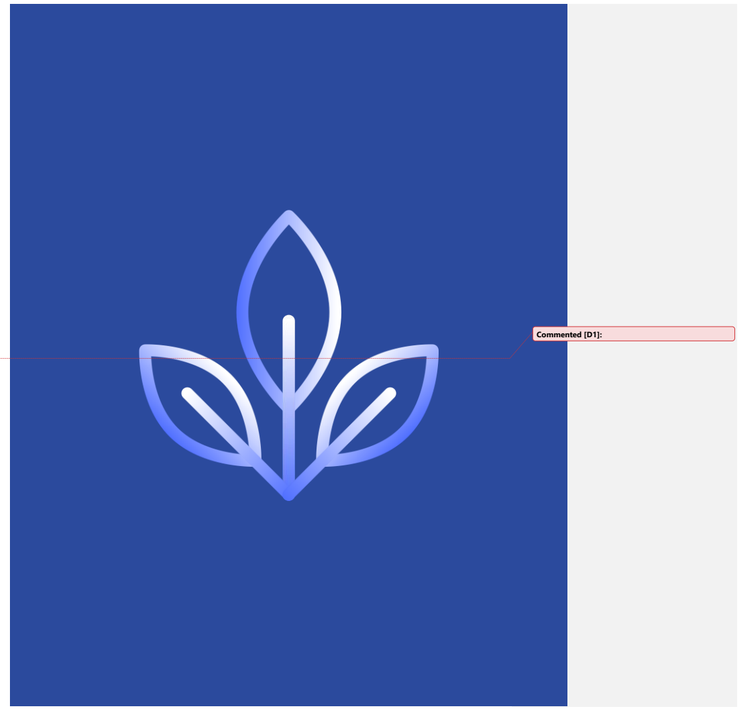

Commented [D1]:

OVERVIEW

In this project we are dealing with how python is used in finding Median ,Mode and Statistic Data which is used by manufacturing company to analyse progress

REAL TIME USES

1) To check progress of enterprise
2) To analyse trends

LIBRARIES USED

a) PANDAS:-

Pandas is a software library used in python for data manupulation and analysis. It offers data structure and operation in numerical table.

b)MATPLOTLIB:-

Its is a cross-platform, data visualization and graphical plotting in python and also numerical extension of

numpy

```
[1]: import pandas as pd
     df=pd.read_csv("Book.csv")
     print(df.head)
```

```
<bound method NDFrame.head of     Year Industry_aggregation_NZSIOC  Industry_code_NZSIOC  \
0   2021                    Level 1                 99999
1   2021                    Level 1                 99999
2   2021                    Level 1                 99999
3   2021                    Level 1                 99999
4   2021                    Level 1                 99999
5   2021                    Level 1                 99999
6   2021                    Level 1                 99999
7   2021                    Level 1                 99999
8   2021                    Level 1                 99999
9   2021                    Level 1                 99999
10  2021                    Level 1                 99999
11  2021                    Level 1                 99999
12  2021                    Level 1                 99999
13  2021                    Level 1                 99999
14  2021                    Level 1                 99999
15  2021                    Level 1                 99999
16  2021                    Level 1                 99999
17  2021                    Level 1                 99999
```

	Value
0	7,57,504
1	6,74,890
2	49,593
3	33,020
4	6,54,404
5	26,138
6	6,991
7	27,801
8	1,23,620
9	275
10	2,085
11	4,52,963
12	14,806
13	68,896
14	69,127
15	1,03,330
16	25,12,677

10	2,085
11	4,52,963
12	14,806
13	68,896
14	69,127
15	1,03,330
16	25,12,677
17	7,30,587
18	5,91,351
19	11,90,739
20	25,12,677
21	8,13,949
22	9,33,093
23	7,65,635
24	4,00,900
25	54,700
26	78
27	71
28	13

>

Age	Branches	Abroad
14	28	7
12	24	6
8	16	6
6	12	3
12	24	6
4	8	2
12	24	5
4	8	7
2	4	8
4	8	4
4	8	2
8	16	1
2	4	5
12	24	9
12	24	8
2	4	2
14	28	6
15	30	5
10	20	4
22	44	5
5	10	5
16	32	7
18	38	8
4	8	9
8	16	8
10	20	5
14	28	1
16	32	2
13	26	6

In [2]:
```
new_df=df.dropna()
df.dropna(inplace=True)
print(new_df.info())
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 29 entries, 0 to 28
Data columns (total 9 columns):
 #   Column                       Non-Null Count  Dtype 
---  ------                       --------------  ----- 
 0   Year                         29 non-null     int64 
 1   Industry_aggregation_NZSIOC  29 non-null     object
 2   Industry_code_NZSIOC         29 non-null     int64 
 3   Industry_name_NZSIOC         29 non-null     object
 4   Units                        29 non-null     object
 5   Variable_code                29 non-null     object
 6   Variable_name                29 non-null     object
 7   Variable_category            29 non-null     object
 8   Value                        29 non-null     object
dtypes: int64(2), object(7)
memory usage: 2.2+ KB
None
```

In [3]:
```
import pandas as pd
df=pd.read_csv("Book.csv")
a=df['Value'].tolist()
print(a)
```

```
['7,57,504', '6,74,890', '49,593', '33,020', '6,54,404', '26,138', '6,991', '27,801', '1,23,620', '275', '2,085', '4,52,963',
'14,806', '68,896', '69,127', '1,03,330', '25,12,677', '7,30,587', '5,91,351', '11,90,739', '25,12,677', '8,13,949', '9,33,09
3', '7,65,635', '4,00,900', '54,700', '78', '71', '13']
```

In [4]:
```
import statistics as st
print(st.median(a))
```

```
49,593
```

In [5]:
```
print(st.mode(a))
```

```
25,12,677
```

[21]:
```
import matplotlib.pyplot as plt
y=[0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28]
```

[23]:
```
import matplotlib.pyplot as plt
x=[0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28]
y=a
plt.bar(x,y,color="violet")
plt.show()
```