

Vijay(Book26) 04/08/2023

In [1]:

```
1 import numpy as np
2 import pandas as pd
3 import matplotlib.pyplot as plt
4 import seaborn as sns
5 from sklearn.linear_model import LogisticRegression
6 from sklearn.preprocessing import StandardScaler
7 import re
8 from sklearn.datasets import load_digits
9 from sklearn.model_selection import train_test_split
```

In [2]:

1 a=pd.read_csv(r"C:\Users\user\Downloads\Book26.csv")

2 a

Out[2]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
0	0	ANDAMAN & NICOBAR ISLANDS	1901	49.2	87.1	29.2	2.3	528.8	517.5	365.1	481.1	332.6	300.0
1	1	ANDAMAN & NICOBAR ISLANDS	1902	0.0	159.8	12.2	0.0	446.1	537.1	228.9	753.7	666.2	100.0
2	2	ANDAMAN & NICOBAR ISLANDS	1903	12.7	144.0	0.0	1.0	235.1	479.9	728.4	326.7	339.0	100.0
3	3	ANDAMAN & NICOBAR ISLANDS	1904	9.4	14.7	0.0	202.4	304.5	495.1	502.0	160.1	820.4	200.0
4	4	ANDAMAN & NICOBAR ISLANDS	1905	1.3	0.0	3.3	26.9	279.5	628.7	368.7	330.5	297.0	200.0
...
105	105	ANDAMAN & NICOBAR ISLANDS	2011	265.9	84.8	272.8	111.4	326.5	383.2	583.2	441.5	757.1	200.0
106	106	ANDAMAN & NICOBAR ISLANDS	2012	119.9	45.6	30.9	55.8	533.9	458.2	317.3	369.6	868.9	200.0
107	107	ANDAMAN & NICOBAR ISLANDS	2013	67.1	37.6	43.0	46.3	509.3	777.0	564.8	336.7	473.6	400.0
108	108	ANDAMAN & NICOBAR ISLANDS	2014	41.9	8.6	0.0	11.1	238.0	416.6	467.6	321.6	412.9	400.0
109	109	ANDAMAN & NICOBAR ISLANDS	2015	126.8	7.6	3.1	138.2	331.9	346.4	328.9	480.0	523.3	200.0

110 rows × 20 columns

In [3]: 1 a.info()

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 110 entries, 0 to 109
Data columns (total 20 columns):
#   Column          Non-Null Count  Dtype
---  -
0   index           110 non-null    int64
1   SUBDIVISION     110 non-null    object
2   YEAR            110 non-null    int64
3   JAN             110 non-null    float64
4   FEB             110 non-null    float64
5   MAR             108 non-null    float64
6   APR             108 non-null    float64
7   MAY             109 non-null    float64
8   JUN             108 non-null    float64
9   JUL             108 non-null    float64
10  AUG             108 non-null    float64
11  SEP             107 non-null    float64
12  OCT             108 non-null    float64
13  NOV             108 non-null    float64
14  DEC             107 non-null    float64
15  ANNUAL          104 non-null    float64
16  Jan-Feb         110 non-null    float64
17  Mar-May         107 non-null    float64
18  Jun-Sep         107 non-null    float64
19  Oct-Dec         107 non-null    float64
dtypes: float64(17), int64(2), object(1)
memory usage: 17.3+ KB
```

In [4]:

1

b=a.fillna(method='ffill')

2

b

Out[4]:

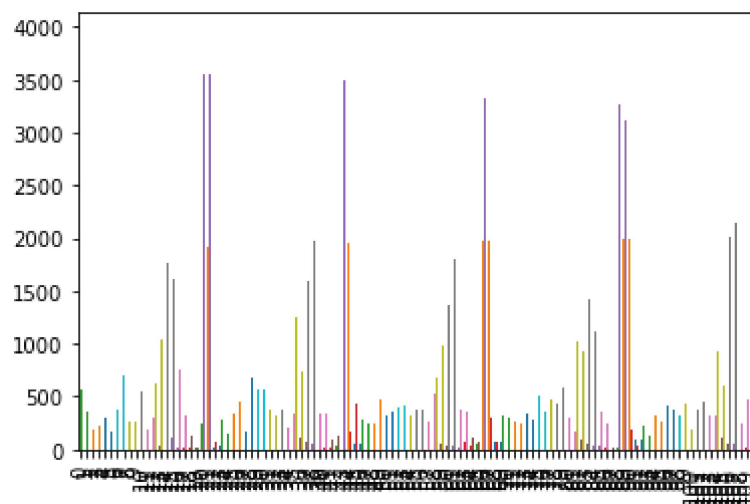
	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
0	0	ANDAMAN & NICOBAR ISLANDS	1901	49.2	87.1	29.2	2.3	528.8	517.5	365.1	481.1	332.6	300.0
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...
105	105	ANDAMAN & NICOBAR ISLANDS	2011	265.9	84.8	272.8	111.4	326.5	383.2	583.2	441.5	757.1	200.0
106	106	ANDAMAN & NICOBAR ISLANDS	2012	119.9	45.6	30.9	55.8	533.9	458.2	317.3	369.6	868.9	200.0
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108	108	ANDAMAN & NICOBAR ISLANDS	2014	41.9	8.6	0.0	11.1	238.0	416.6	467.6	321.6	412.9	400.0
109	109	ANDAMAN & NICOBAR ISLANDS	2015	126.8	7.6	3.1	138.2	331.9	346.4	328.9	480.0	523.3	200.0

110 rows × 20 columns



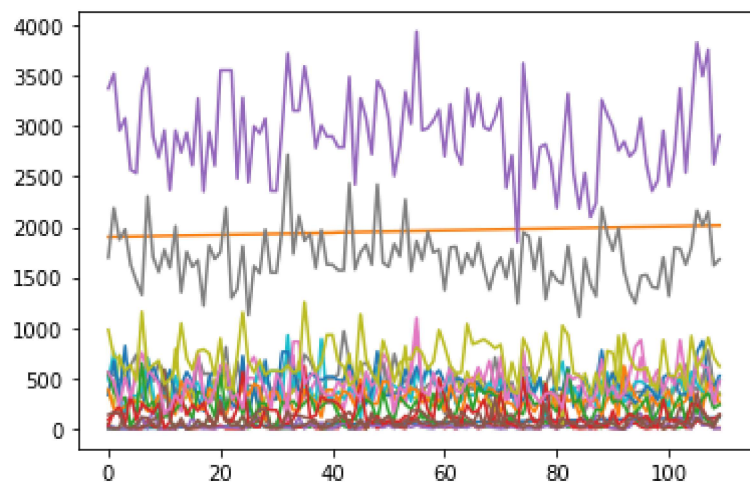
```
In [5]: 1 b.plot.bar(legend=None)
```

```
Out[5]: <AxesSubplot:>
```



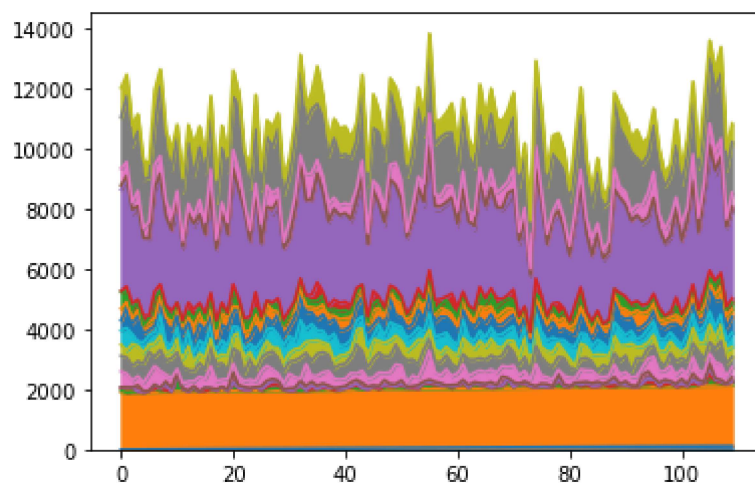
```
In [6]: 1 b.plot.line(legend=None)
```

```
Out[6]: <AxesSubplot:>
```



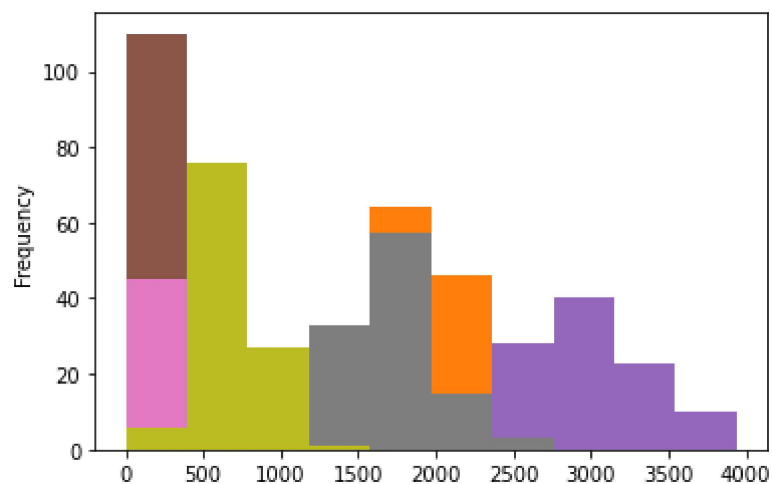
```
In [7]: 1 b.plot.area(legend=None)
```

```
Out[7]: <AxesSubplot:>
```



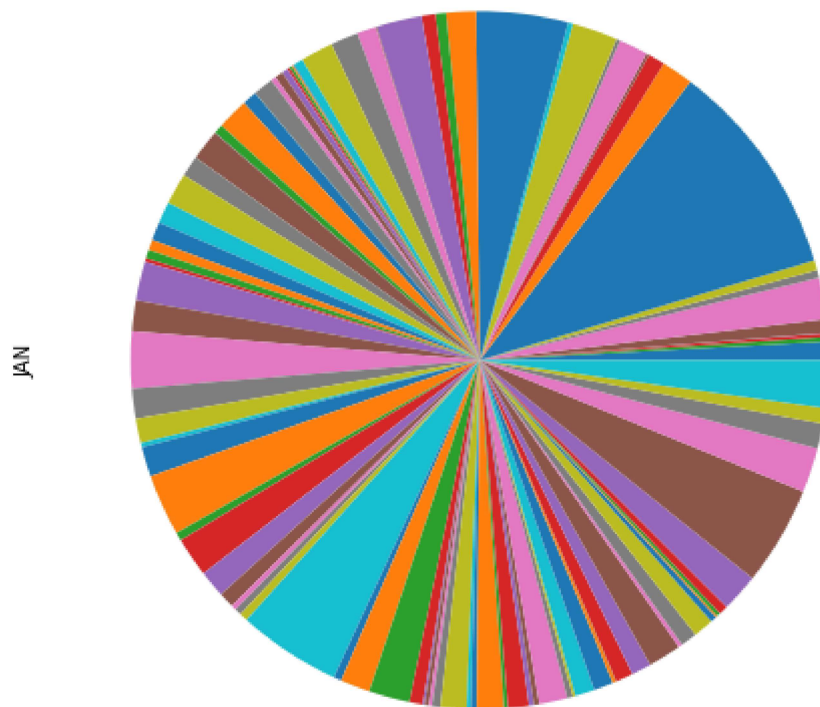
```
In [8]: 1 b.plot.hist(legend=None)
```

```
Out[8]: <AxesSubplot:ylabel='Frequency'>
```



```
In [10]: 1 b.plot.pie(y='JAN',figsize=(8,8),labels=None,legend=None)
```

```
Out[10]: <AxesSubplot:ylabel='JAN'>
```



```
In [ ]: 1
```