

```
In [1]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
from sklearn.linear_model import LogisticRegression
from sklearn.preprocessing import StandardScaler
import re
from sklearn.datasets import load_digits
```

```
In [2]: a=pd.read_csv(r"C:\Users\user\Downloads\FP2_RainFall\rainfall in india 1901-2014.csv")
```

Out[2]:

		index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
0	0	0	ANDAMAN & NICOBAR ISLANDS	1901	49.2	87.1	29.2	2.3	528.8	517.5	365.1	481.1	332.6
1	1	1	ANDAMAN & NICOBAR ISLANDS	1902	0.0	159.8	12.2	0.0	446.1	537.1	228.9	753.7	666.2
2	2	2	ANDAMAN & NICOBAR ISLANDS	1903	12.7	144.0	0.0	1.0	235.1	479.9	728.4	326.7	339.0
3	3	3	ANDAMAN & NICOBAR ISLANDS	1904	9.4	14.7	0.0	202.4	304.5	495.1	502.0	160.1	820.4
4	4	4	ANDAMAN & NICOBAR ISLANDS	1905	1.3	0.0	3.3	26.9	279.5	628.7	368.7	330.5	297.0
...	...	...	...	...	...	...	...	...	...	...	...	...	...
4111	4111	LAKSHADWEEP	LAKSHADWEEP	2011	5.1	2.8	3.1	85.9	107.2	153.6	350.2	254.0	255.2
4112	4112	LAKSHADWEEP	LAKSHADWEEP	2012	19.2	0.1	1.6	76.8	21.2	327.0	231.5	381.2	179.8
4113	4113	LAKSHADWEEP	LAKSHADWEEP	2013	26.2	34.4	37.5	5.3	88.3	426.2	296.4	154.4	180.0
4114	4114	LAKSHADWEEP	LAKSHADWEEP	2014	53.2	16.1	4.4	14.9	57.4	244.1	116.1	466.1	132.2
4115	4115	LAKSHADWEEP	LAKSHADWEEP	2015	2.2	0.5	3.7	87.1	133.1	296.6	257.5	146.4	160.4

4116 rows × 20 columns

In [3]:

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 4116 entries, 0 to 4115
Data columns (total 20 columns):
 #   Column      Non-Null Count  Dtype  
--- 
 0   index       4116 non-null    int64  
 1   SUBDIVISION 4116 non-null    object  
 2   YEAR        4116 non-null    int64  
 3   JAN         4112 non-null    float64 
 4   FEB         4113 non-null    float64 
 5   MAR         4110 non-null    float64 
 6   APR         4112 non-null    float64 
 7   MAY         4113 non-null    float64 
 8   JUN         4111 non-null    float64 
 9   JUL         4109 non-null    float64 
 10  AUG         4112 non-null    float64 
 11  SEP         4110 non-null    float64 
 12  OCT         4109 non-null    float64 
 13  NOV         4105 non-null    float64 
 14  DEC         4106 non-null    float64 
 15  ANNUAL      4090 non-null    float64 
 16  Jan-Feb     4110 non-null    float64 
 17  Mar-May     4107 non-null    float64 
 18  Jun-Sep     4106 non-null    float64 
 19  Oct-Dec     4103 non-null    float64 
dtypes: float64(17), int64(2), object(1)
memory usage: 643.2+ KB
```

In [4]:

```
Out[4]: Index(['index', 'SUBDIVISION', 'YEAR', 'JAN', 'FEB', 'MAR', 'APR', 'MAY',
   'JUN', 'JUL', 'AUG', 'SEP', 'OCT', 'NOV', 'DEC', 'ANNUAL', 'Jan-Feb',
   'Mar-May', 'Jun-Sep', 'Oct-Dec'],
  dtype='object')
```

## HARYANA DELHI & CHANDIGARH

In [205]: `b=a.head(1472)`

Out[205]:

		index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
		0	ANDAMAN & NICOBAR ISLANDS	1901	49.2	87.1	29.2	2.3	528.8	517.5	365.1	481.1	332.6
		1	ANDAMAN & NICOBAR ISLANDS	1902	0.0	159.8	12.2	0.0	446.1	537.1	228.9	753.7	666.2
		2	ANDAMAN & NICOBAR ISLANDS	1903	12.7	144.0	0.0	1.0	235.1	479.9	728.4	326.7	339.0
		3	ANDAMAN & NICOBAR ISLANDS	1904	9.4	14.7	0.0	202.4	304.5	495.1	502.0	160.1	820.4
		4	ANDAMAN & NICOBAR ISLANDS	1905	1.3	0.0	3.3	26.9	279.5	628.7	368.7	330.5	297.0
		...	...	...	...	...	...	...	...	...	...	...	...
	1467	1467	HARYANA DELHI & CHANDIGARH	2011	0.7	26.7	6.9	8.9	28.7	94.4	85.0	127.3	133.1
	1468	1468	HARYANA DELHI & CHANDIGARH	2012	8.2	0.2	0.1	11.8	3.8	5.3	68.1	196.6	90.7
	1469	1469	HARYANA DELHI & CHANDIGARH	2013	21.1	52.2	5.3	3.3	1.4	62.1	96.5	161.9	42.8
	1470	1470	HARYANA DELHI & CHANDIGARH	2014	13.0	17.3	26.8	7.5	20.3	25.9	72.3	34.8	67.3
	1471	1471	HARYANA DELHI & CHANDIGARH	2015	12.4	6.6	71.8	34.8	8.4	43.7	130.3	89.2	32.1

1472 rows × 20 columns

In [208]: `c=b.tail(115)`

Out[208]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1357	1357	HARYANA DELHI & CHANDIGARH	1901	35.4	28.9	11.1	0.0	5.1	13.2	126.4	151.5	10.5	2.0
1358	1358	HARYANA DELHI & CHANDIGARH	1902	0.0	0.7	2.9	10.2	15.8	74.6	149.3	97.1	59.8	9.3
1359	1359	HARYANA DELHI & CHANDIGARH	1903	14.7	0.5	2.3	0.5	8.5	8.6	151.6	138.2	97.7	4.0
1360	1360	HARYANA DELHI & CHANDIGARH	1904	7.6	0.7	48.0	0.5	29.3	34.3	109.7	162.9	102.3	1.5
1361	1361	HARYANA DELHI & CHANDIGARH	1905	44.8	20.8	14.0	1.3	7.4	20.1	93.6	23.1	92.6	0.0
...	...	...	...	...	...	...	...	...	...	...	...	...	...
1467	1467	HARYANA DELHI & CHANDIGARH	2011	0.7	26.7	6.9	8.9	28.7	94.4	85.0	127.3	133.1	0.0
1468	1468	HARYANA DELHI & CHANDIGARH	2012	8.2	0.2	0.1	11.8	3.8	5.3	68.1	196.6	90.7	2.4
1469	1469	HARYANA DELHI & CHANDIGARH	2013	21.1	52.2	5.3	3.3	1.4	62.1	96.5	161.9	42.8	10.9
1470	1470	HARYANA DELHI & CHANDIGARH	2014	13.0	17.3	26.8	7.5	20.3	25.9	72.3	34.8	67.3	10.5
1471	1471	HARYANA DELHI & CHANDIGARH	2015	12.4	6.6	71.8	34.8	8.4	43.7	130.3	89.2	32.1	3.7

115 rows × 20 columns

In [209]: `d=c[['YEAR', 'JAN', 'FEB', 'MAR']]`

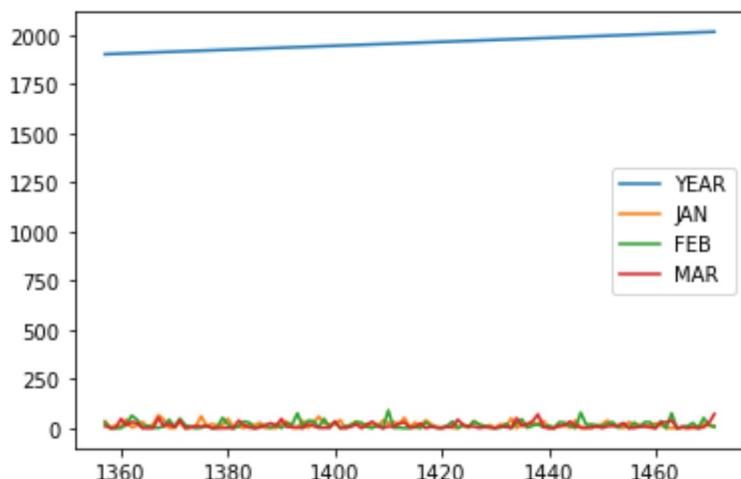
Out[209]:

	YEAR	JAN	FEB	MAR
1357	1901	35.4	28.9	11.1
1358	1902	0.0	0.7	2.9
1359	1903	14.7	0.5	2.3
1360	1904	7.6	0.7	48.0
1361	1905	44.8	20.8	14.0
...	...	...	...	...
1467	2011	0.7	26.7	6.9
1468	2012	8.2	0.2	0.1
1469	2013	21.1	52.2	5.3
1470	2014	13.0	17.3	26.8
1471	2015	12.4	6.6	71.8

115 rows × 4 columns

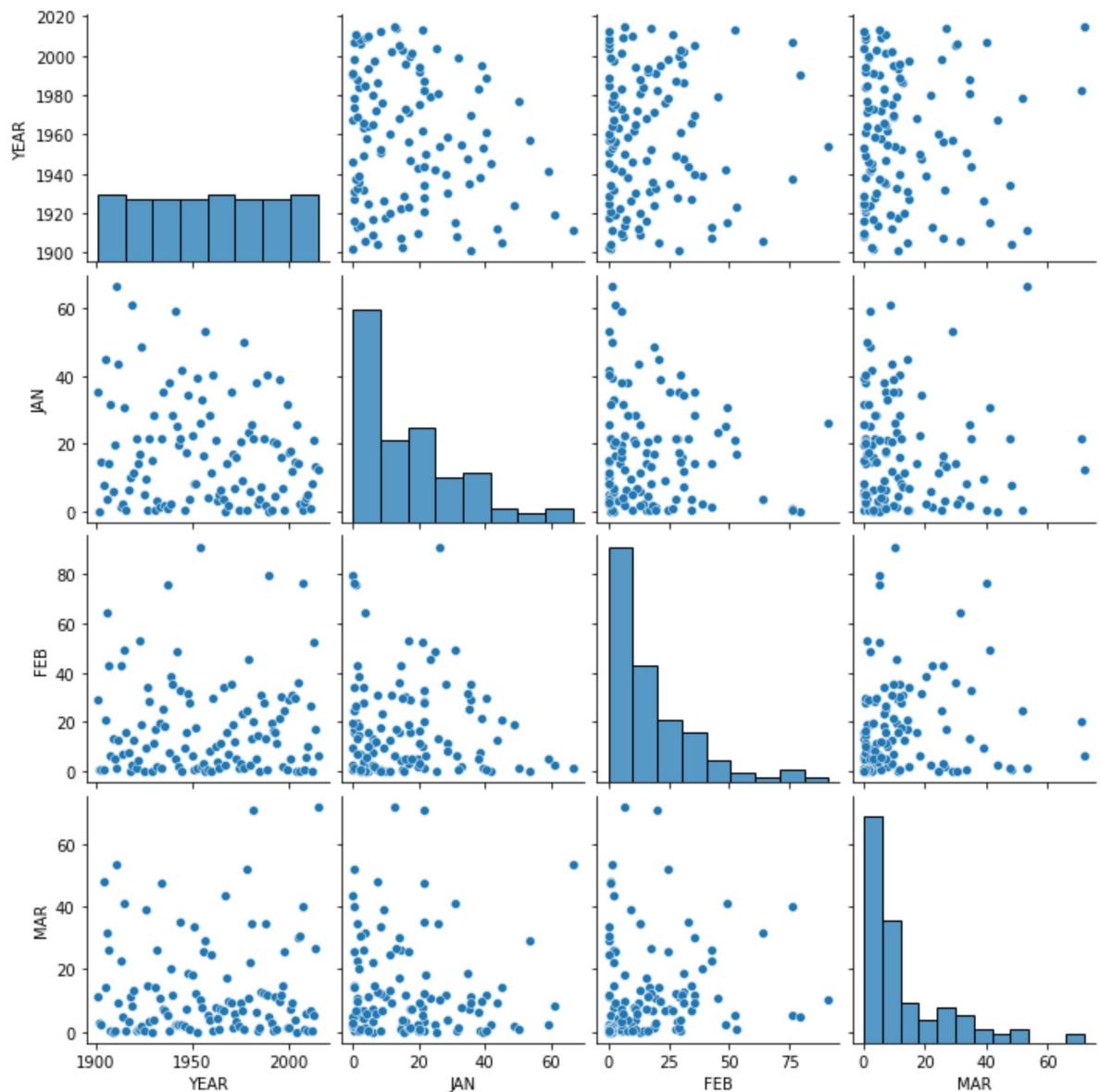
In [210]:

Out[210]: <AxesSubplot:>



In [211]:

Out[211]: &lt;seaborn.axisgrid.PairGrid at 0x227f996ce80&gt;

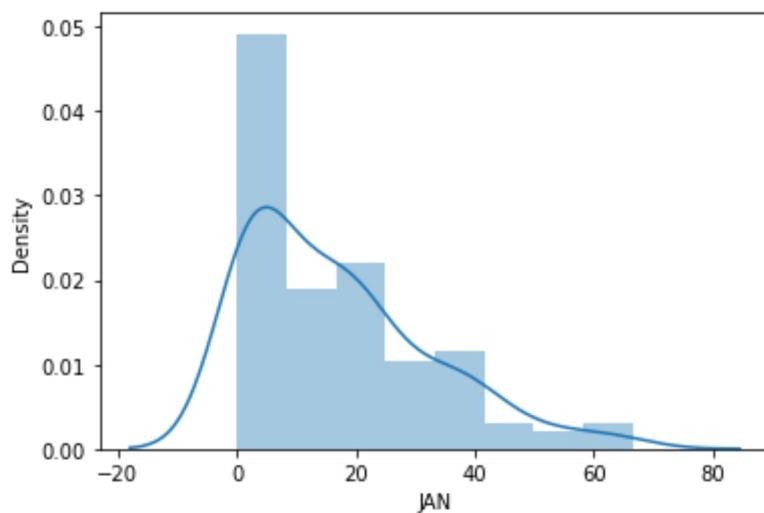


In [212]:

```
C:\ProgramData\Anaconda3\lib\site-packages\seaborn\distributions.py:2557: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).
```

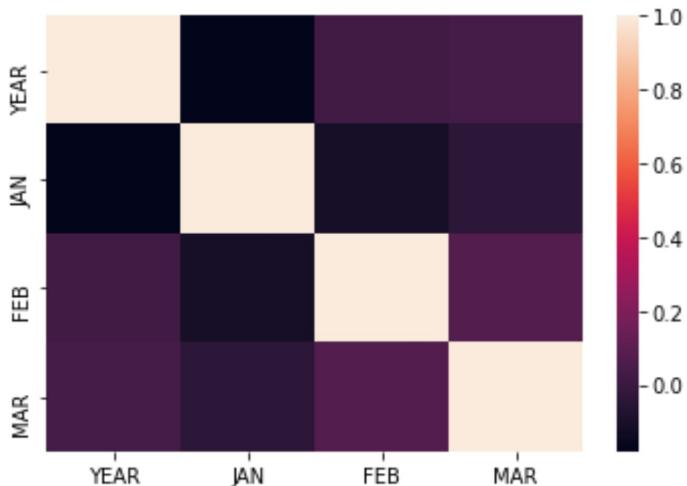
```
    warnings.warn(msg, FutureWarning)
```

Out[212]: &lt;AxesSubplot:xlabel='JAN', ylabel='Density'&gt;



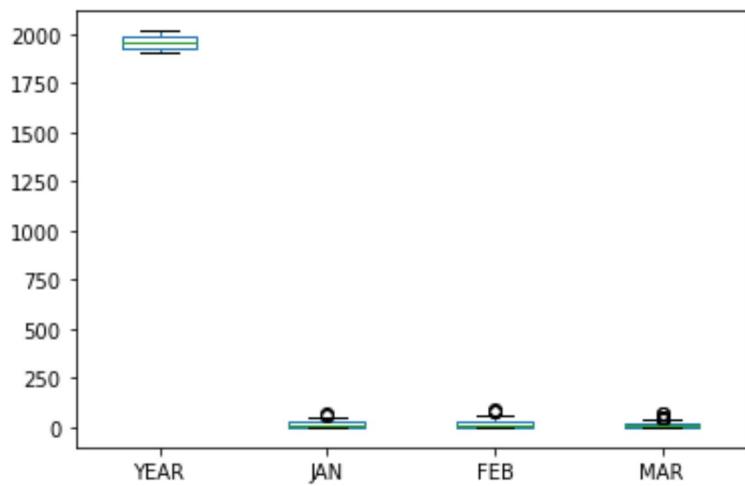
In [213]:

Out[213]: &lt;AxesSubplot:&gt;



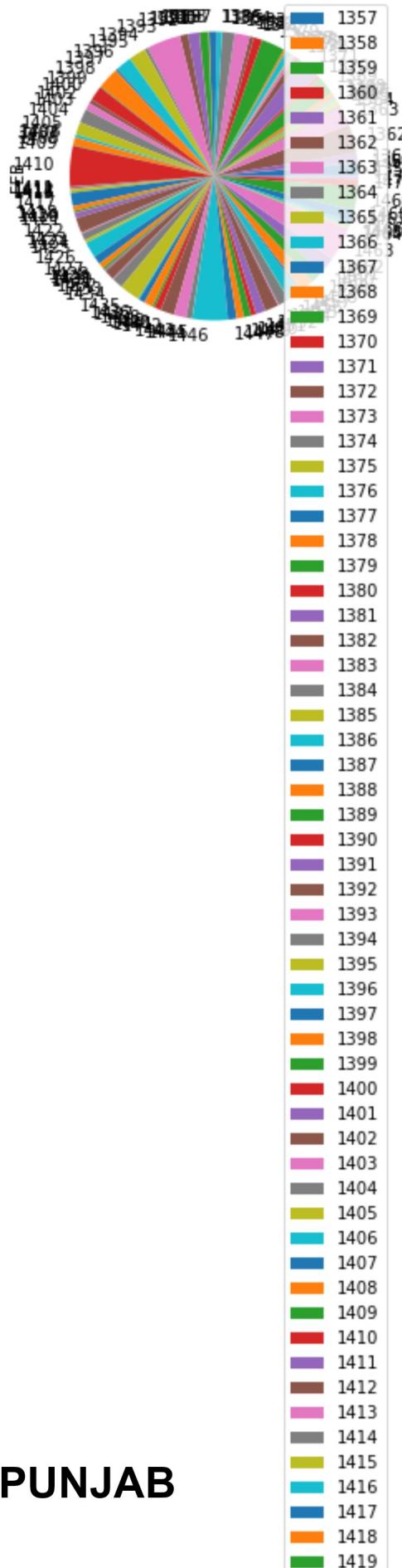
In [214]:

Out[214]: &lt;AxesSubplot:&gt;



In [215]:

Out[215]: <AxesSubplot:ylabel='FEB'>



In [219]: `c=a.head(1587)`

Out[219]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0	0	ANDAMAN & NICOBAR ISLANDS	1901	49.2	87.1	29.2	2.3	528.8	517.5	365.1	481.1	332.6	311.1	250.0	20.0
1	1	ANDAMAN & NICOBAR ISLANDS	1902	0.0	159.8	12.2	0.0	446.1	537.1	228.9	753.7	666.2	119.1	119.1	119.1
2	2	ANDAMAN & NICOBAR ISLANDS	1903	12.7	144.0	0.0	1.0	235.1	479.9	728.4	326.7	339.0	119.1	119.1	119.1
3	3	ANDAMAN & NICOBAR ISLANDS	1904	9.4	14.7	0.0	202.4	304.5	495.1	502.0	160.1	820.4	21.2	21.2	21.2
4	4	ANDAMAN & NICOBAR ISLANDS	1905	1.3	0.0	3.3	26.9	279.5	628.7	368.7	330.5	297.0	21.2	21.2	21.2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1582	1582	PUNJAB	2011	3.5	35.6	8.2	17.8	18.9	162.9	120.9	193.5	140.2	112.3	24.4	24.4
1583	1583	PUNJAB	2012	62.6	3.2	1.9	31.1	1.6	11.9	120.2	135.1	112.3	112.3	112.3	112.3
1584	1584	PUNJAB	2013	9.3	50.1	11.6	3.4	3.6	120.3	117.9	217.1	24.4	24.4	24.4	24.4
1585	1585	PUNJAB	2014	21.8	20.1	30.3	24.5	20.8	20.6	76.3	41.9	105.8	105.8	105.8	105.8
1586	1586	PUNJAB	2015	17.7	31.3	68.5	29.8	16.7	48.3	130.2	88.6	69.2	69.2	69.2	69.2

1587 rows × 20 columns

In [223]: `d=c.tail(115)`

Out[223]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1472	1472	PUNJAB	1901	55.7	50.1	25.2	2.1	25.2	10.4	178.2	145.0	24.4	3.7
1473	1473	PUNJAB	1902	0.0	0.8	9.9	10.9	29.6	49.9	125.6	94.9	67.2	9.0
1474	1474	PUNJAB	1903	29.5	0.5	45.0	1.3	9.2	5.2	212.2	119.1	132.5	6.9
1475	1475	PUNJAB	1904	24.2	1.7	87.8	1.2	13.8	22.0	59.9	124.0	73.8	7.4
1476	1476	PUNJAB	1905	53.0	40.3	24.3	0.5	2.2	19.2	122.6	50.3	111.1	1.2
...	...	...	...	...	...	...	...	...	...	...	...	...	...
1582	1582	PUNJAB	2011	3.5	35.6	8.2	17.8	18.9	162.9	120.9	193.5	140.2	0.0
1583	1583	PUNJAB	2012	62.6	3.2	1.9	31.1	1.6	11.9	120.2	135.1	112.3	2.2
1584	1584	PUNJAB	2013	9.3	50.1	11.6	3.4	3.6	120.3	117.9	217.1	24.4	16.2
1585	1585	PUNJAB	2014	21.8	20.1	30.3	24.5	20.8	20.6	76.3	41.9	105.8	6.0
1586	1586	PUNJAB	2015	17.7	31.3	68.5	29.8	16.7	48.3	130.2	88.6	69.2	9.0

115 rows × 20 columns

In [224]: `e=d[['JAN', 'FEB', 'MAR']]`

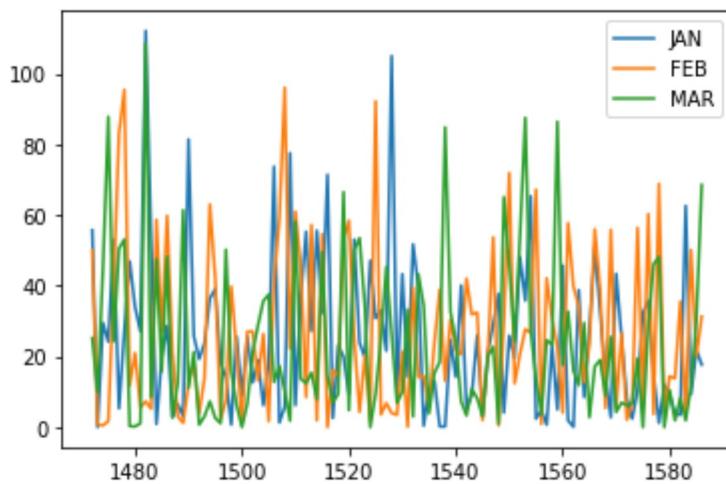
Out[224]:

	JAN	FEB	MAR
1472	55.7	50.1	25.2
1473	0.0	0.8	9.9
1474	29.5	0.5	45.0
1475	24.2	1.7	87.8
1476	53.0	40.3	24.3
...	...	...	...
1582	3.5	35.6	8.2
1583	62.6	3.2	1.9
1584	9.3	50.1	11.6
1585	21.8	20.1	30.3
1586	17.7	31.3	68.5

115 rows × 3 columns

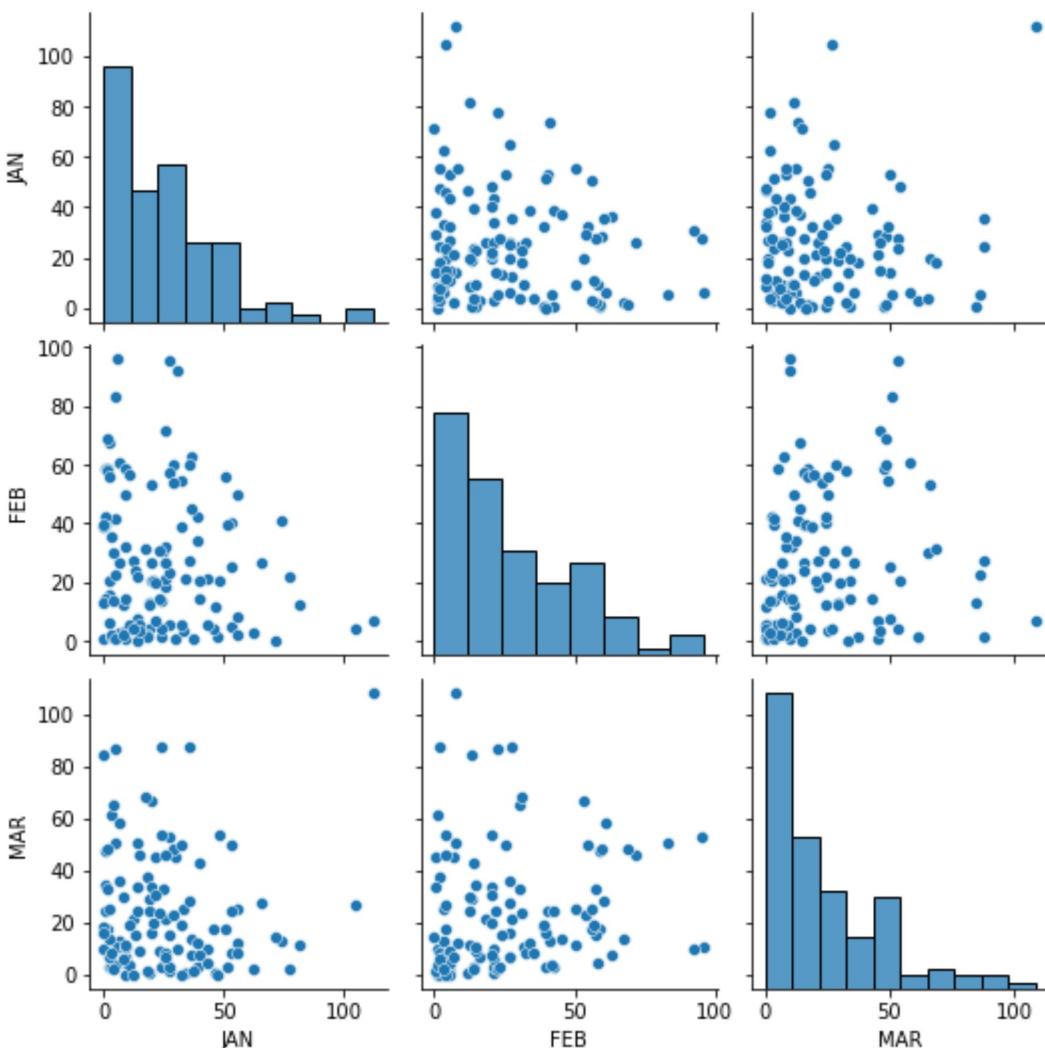
In [225]:

Out[225]: &lt;AxesSubplot:&gt;



In [226]:

Out[226]: &lt;seaborn.axisgrid.PairGrid at 0x227fb8a12b0&gt;

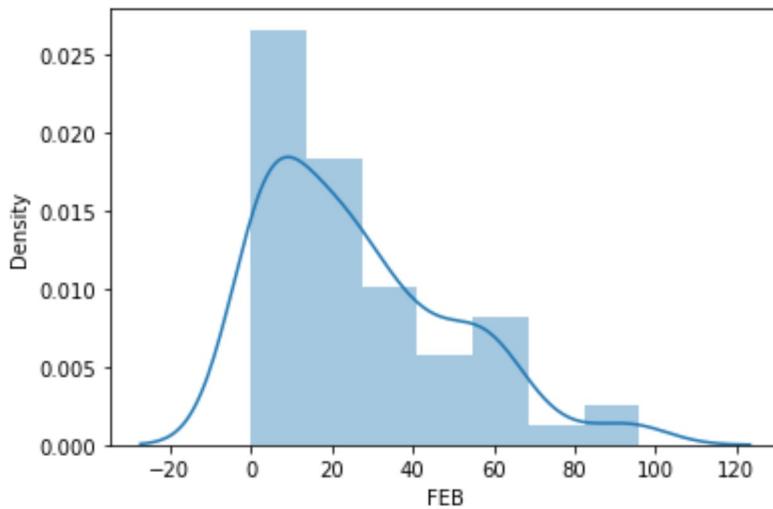


In [227]:

```
C:\ProgramData\Anaconda3\lib\site-packages\seaborn\distributions.py:2557: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).
```

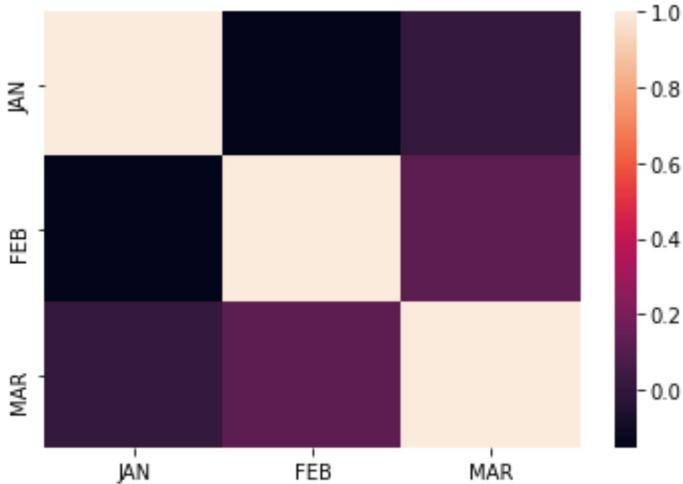
```
    warnings.warn(msg, FutureWarning)
```

Out[227]: &lt;AxesSubplot:xlabel='FEB', ylabel='Density'&gt;



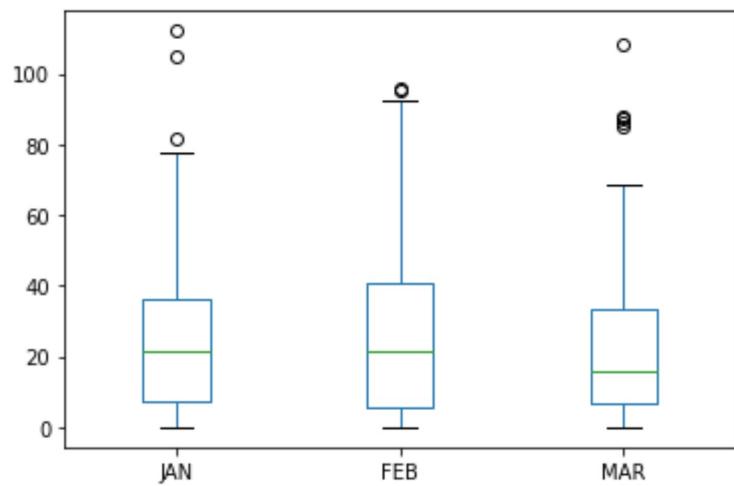
In [228]:

Out[228]: &lt;AxesSubplot:&gt;



In [229]:

Out[229]: &lt;AxesSubplot:&gt;



In [230]:

Out[230]: <AxesSubplot:ylabel='MAR'>



In [232]: `c=a.head(1702)`

Out[232]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
0	0	ANDAMAN & NICOBAR ISLANDS	1901	49.2	87.1	29.2	2.3	528.8	517.5	365.1	481.1	332.6	3
1	1	ANDAMAN & NICOBAR ISLANDS	1902	0.0	159.8	12.2	0.0	446.1	537.1	228.9	753.7	666.2	1
2	2	ANDAMAN & NICOBAR ISLANDS	1903	12.7	144.0	0.0	1.0	235.1	479.9	728.4	326.7	339.0	1
3	3	ANDAMAN & NICOBAR ISLANDS	1904	9.4	14.7	0.0	202.4	304.5	495.1	502.0	160.1	820.4	2
4	4	ANDAMAN & NICOBAR ISLANDS	1905	1.3	0.0	3.3	26.9	279.5	628.7	368.7	330.5	297.0	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...
1697	1697	HIMACHAL PRADESH	2011	43.9	97.4	49.7	62.4	45.1	118.3	177.7	380.2	120.3	
1698	1698	HIMACHAL PRADESH	2012	92.3	51.3	28.4	55.9	9.4	31.1	241.5	280.6	133.1	
1699	1699	HIMACHAL PRADESH	2013	79.9	182.6	76.6	28.9	32.6	233.6	208.8	240.0	65.8	
1700	1700	HIMACHAL PRADESH	2014	69.6	124.9	125.2	60.6	68.9	51.7	203.6	146.7	84.6	
1701	1701	HIMACHAL PRADESH	2015	67.2	156.6	192.5	84.9	45.0	85.8	249.9	195.9	75.5	

1702 rows × 20 columns

In [235]: `d=c.tail(115)`

Out[235]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	O
1587	1587	HIMACHAL PRADESH	1901	137.8	174.5	75.0	19.2	89.6	32.7	280.5	459.7	53.0	
1588	1588	HIMACHAL PRADESH	1902	6.5	27.0	104.4	76.2	61.3	78.8	258.6	199.3	113.4	2
1589	1589	HIMACHAL PRADESH	1903	76.5	21.4	213.7	25.4	54.7	32.2	157.7	256.5	107.9	
1590	1590	HIMACHAL PRADESH	1904	79.3	22.4	131.7	48.0	90.3	33.1	241.1	184.3	56.4	5
1591	1591	HIMACHAL PRADESH	1905	81.3	76.8	160.2	39.3	50.4	43.6	191.1	132.8	119.1	
...	...	...	...	...	...	...	...	...	...	...	...	...	...
1697	1697	HIMACHAL PRADESH	2011	43.9	97.4	49.7	62.4	45.1	118.3	177.7	380.2	120.3	
1698	1698	HIMACHAL PRADESH	2012	92.3	51.3	28.4	55.9	9.4	31.1	241.5	280.6	133.1	
1699	1699	HIMACHAL PRADESH	2013	79.9	182.6	76.6	28.9	32.6	233.6	208.8	240.0	65.8	2
1700	1700	HIMACHAL PRADESH	2014	69.6	124.9	125.2	60.6	68.9	51.7	203.6	146.7	84.6	1
1701	1701	HIMACHAL PRADESH	2015	67.2	156.6	192.5	84.9	45.0	85.8	249.9	195.9	75.5	1

115 rows × 20 columns

In [236]: `e=d[['JAN', 'FEB', 'MAR', 'APR', 'MAY']]`

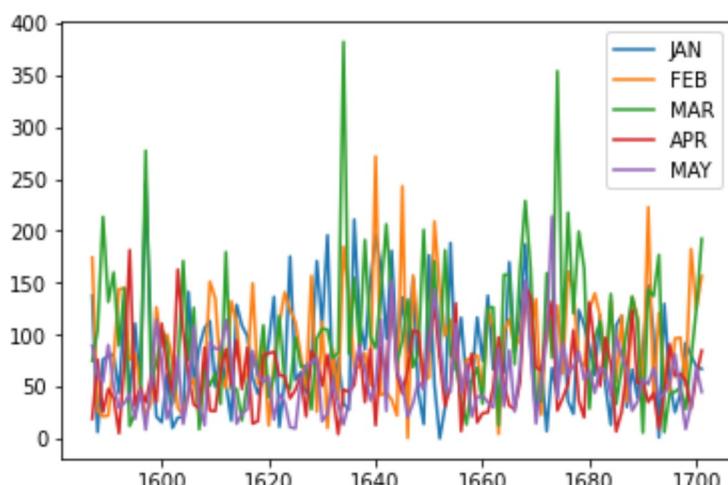
Out[236]:

	JAN	FEB	MAR	APR	MAY
1587	137.8	174.5	75.0	19.2	89.6
1588	6.5	27.0	104.4	76.2	61.3
1589	76.5	21.4	213.7	25.4	54.7
1590	79.3	22.4	131.7	48.0	90.3
1591	81.3	76.8	160.2	39.3	50.4
...	...	...	...	...	...
1697	43.9	97.4	49.7	62.4	45.1
1698	92.3	51.3	28.4	55.9	9.4
1699	79.9	182.6	76.6	28.9	32.6
1700	69.6	124.9	125.2	60.6	68.9
1701	67.2	156.6	192.5	84.9	45.0

115 rows × 5 columns

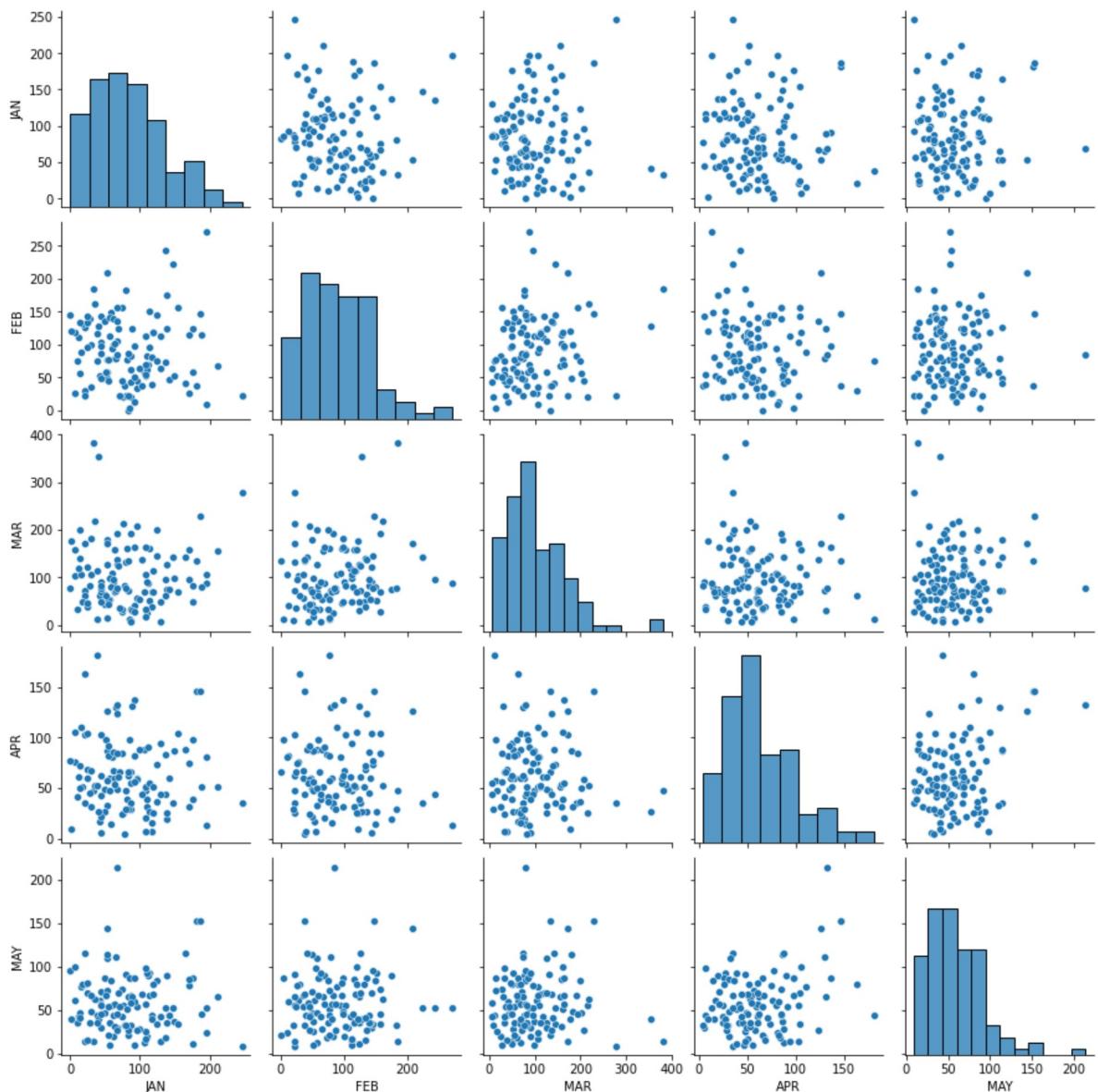
In [237]:

Out[237]: <AxesSubplot:>



In [238]:

Out[238]: &lt;seaborn.axisgrid.PairGrid at 0x227fc537190&gt;

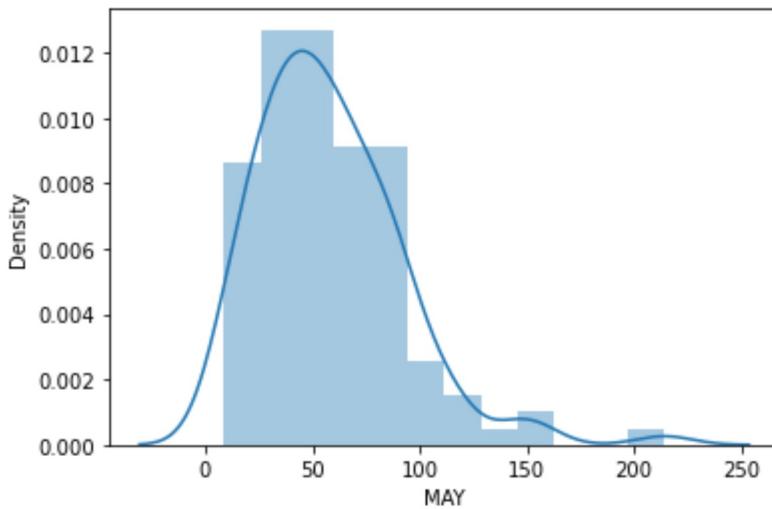


In [239]:

```
C:\ProgramData\Anaconda3\lib\site-packages\seaborn\distributions.py:2557: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).
```

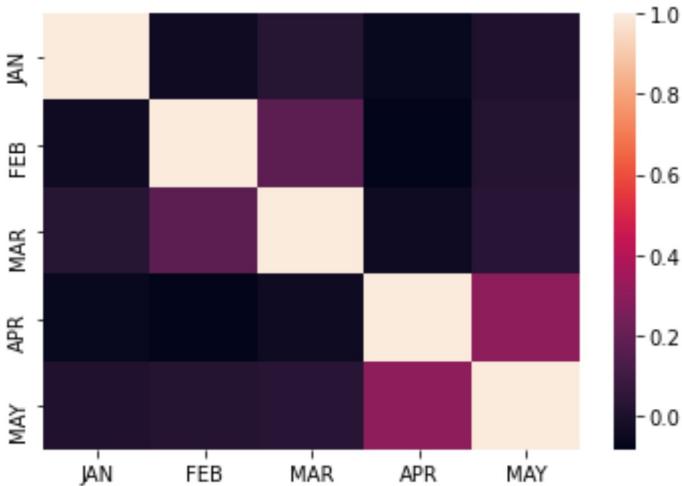
```
    warnings.warn(msg, FutureWarning)
```

Out[239]: &lt;AxesSubplot:xlabel='MAY', ylabel='Density'&gt;



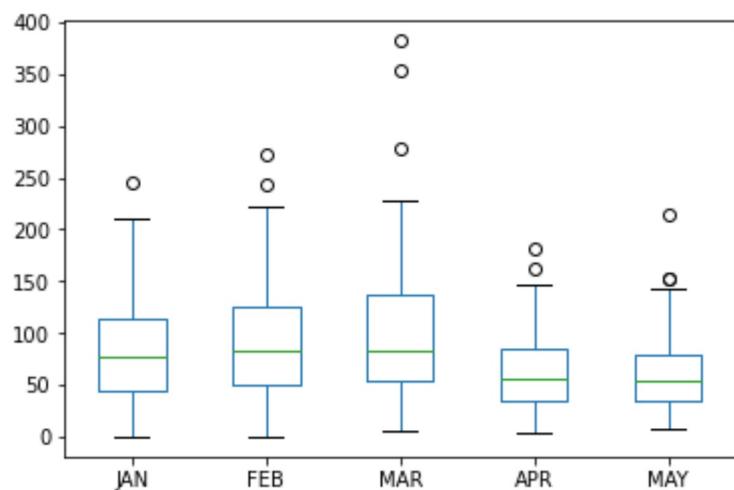
In [240]:

Out[240]: &lt;AxesSubplot:&gt;



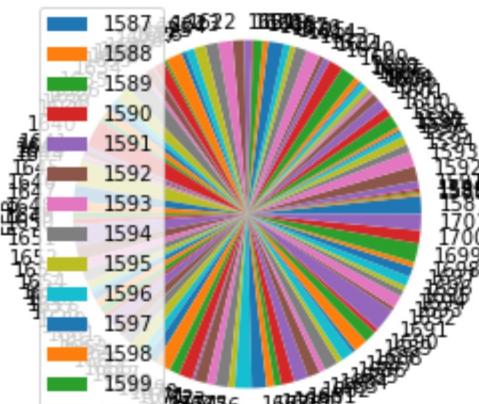
In [241]:

Out[241]: &lt;AxesSubplot:&gt;



In [242]:

Out[242]: <AxesSubplot:ylabel='FEB'>



J&J & KASHMIR

In [244]: c=a.head(1817)

Out[244]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
0	0	ANDAMAN & NICOBAR ISLANDS	1901	49.2	87.1	29.2	2.3	528.8	517.5	365.1	481.1	332.6
1	1	ANDAMAN & NICOBAR ISLANDS	1902	0.0	159.8	12.2	0.0	446.1	537.1	228.9	753.7	666.2
2	2	ANDAMAN & NICOBAR ISLANDS	1903	12.7	144.0	0.0	1.0	235.1	479.9	728.4	326.7	339.0
3	3	ANDAMAN & NICOBAR ISLANDS	1904	9.4	14.7	0.0	202.4	304.5	495.1	502.0	160.1	820.4
4	4	ANDAMAN & NICOBAR ISLANDS	1905	1.3	0.0	3.3	26.9	279.5	628.7	368.7	330.5	297.0
...	...	...	...	...	...	...	...	...	...	...	...	...
1812	1812	JAMMU & KASHMIR	2011	43.4	211.6	97.8	89.0	32.4	72.5	81.6	131.2	72.0
1813	1813	JAMMU & KASHMIR	2012	150.9	95.8	45.2	86.6	48.9	32.6	118.8	264.9	106.7
1814	1814	JAMMU & KASHMIR	2013	52.2	136.4	41.9	47.4	47.4	80.5	125.1	219.1	41.2
1815	1815	JAMMU & KASHMIR	2014	75.8	64.0	153.1	76.1	52.7	25.3	100.5	134.6	362.8
1816	1816	JAMMU & KASHMIR	2015	27.9	187.2	341.4	173.3	64.6	121.4	233.2	129.2	130.2

1817 rows × 20 columns

In [245]: `d=c.tail(115)`

Out[245]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1702	1702	JAMMU & KASHMIR	1901	66.4	69.3	69.6	132.2	105.8	53.4	171.7	181.3	101.8
1703	1703	JAMMU & KASHMIR	1902	6.5	9.7	91.3	100.5	70.7	113.3	108.4	136.9	62.2
1704	1704	JAMMU & KASHMIR	1903	96.2	21.5	238.6	58.7	57.3	18.9	332.5	218.6	176.9
1705	1705	JAMMU & KASHMIR	1904	110.6	17.3	145.2	64.5	67.8	25.9	182.3	132.2	62.3
1706	1706	JAMMU & KASHMIR	1905	146.7	76.3	161.4	71.7	65.2	43.3	145.2	111.5	239.7
...	...	...	...	...	...	...	...	...	...	...	...	...
1812	1812	JAMMU & KASHMIR	2011	43.4	211.6	97.8	89.0	32.4	72.5	81.6	131.2	72.0
1813	1813	JAMMU & KASHMIR	2012	150.9	95.8	45.2	86.6	48.9	32.6	118.8	264.9	106.7
1814	1814	JAMMU & KASHMIR	2013	52.2	136.4	41.9	47.4	47.4	80.5	125.1	219.1	41.2
1815	1815	JAMMU & KASHMIR	2014	75.8	64.0	153.1	76.1	52.7	25.3	100.5	134.6	362.8
1816	1816	JAMMU & KASHMIR	2015	27.9	187.2	341.4	173.3	64.6	121.4	233.2	129.2	130.2

115 rows × 20 columns

In [246]: `e=d[['JAN', 'FEB', 'MAR','APR','MAY']]`

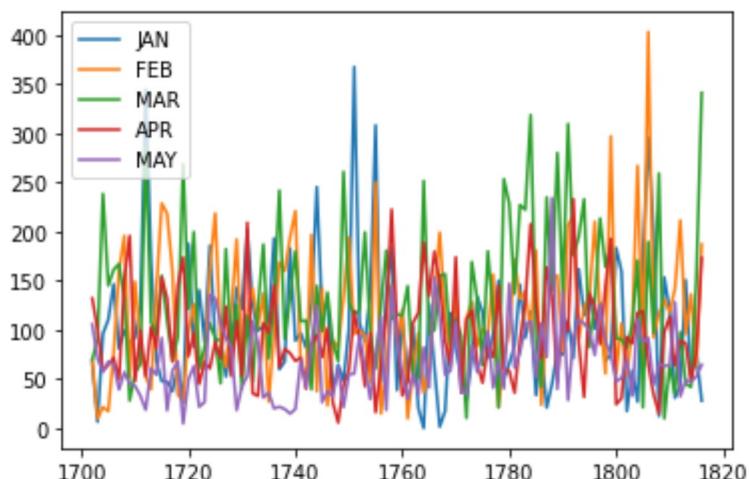
Out[246]:

	JAN	FEB	MAR	APR	MAY
<b>1702</b>	66.4	69.3	69.6	132.2	105.8
<b>1703</b>	6.5	9.7	91.3	100.5	70.7
<b>1704</b>	96.2	21.5	238.6	58.7	57.3
<b>1705</b>	110.6	17.3	145.2	64.5	67.8
<b>1706</b>	146.7	76.3	161.4	71.7	65.2
...	...	...	...	...	...
<b>1812</b>	43.4	211.6	97.8	89.0	32.4
<b>1813</b>	150.9	95.8	45.2	86.6	48.9
<b>1814</b>	52.2	136.4	41.9	47.4	47.4
<b>1815</b>	75.8	64.0	153.1	76.1	52.7
<b>1816</b>	27.9	187.2	341.4	173.3	64.6

115 rows × 5 columns

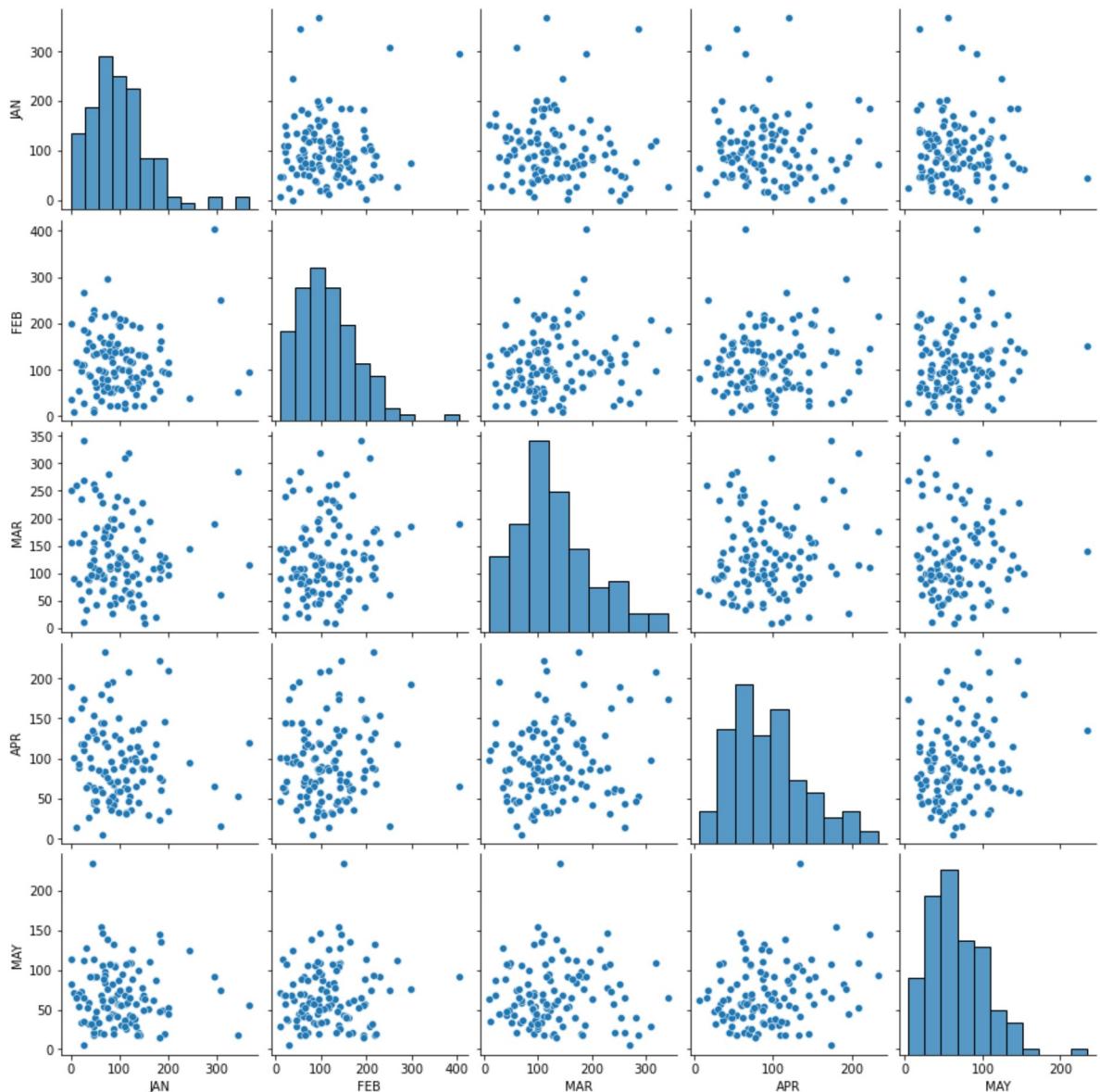
In [247]:

Out[247]: <AxesSubplot:>



In [248]:

Out[248]: &lt;seaborn.axisgrid.PairGrid at 0x227fd79d220&gt;

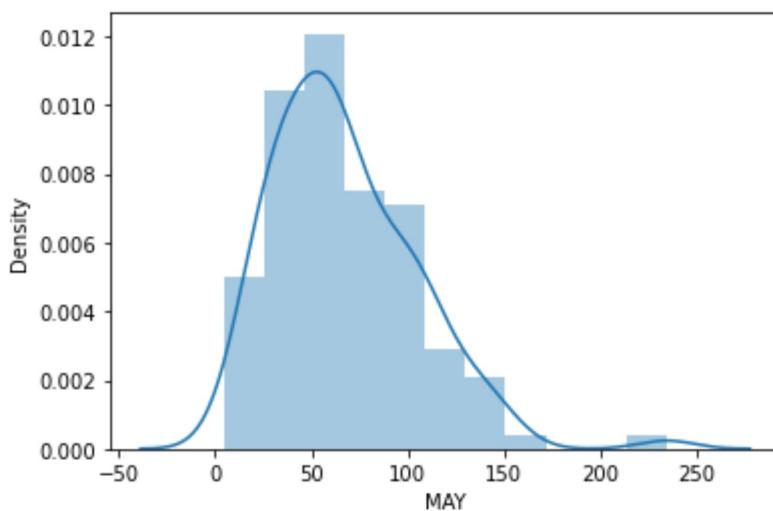


In [249]:

```
C:\ProgramData\Anaconda3\lib\site-packages\seaborn\distributions.py:2557: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).
```

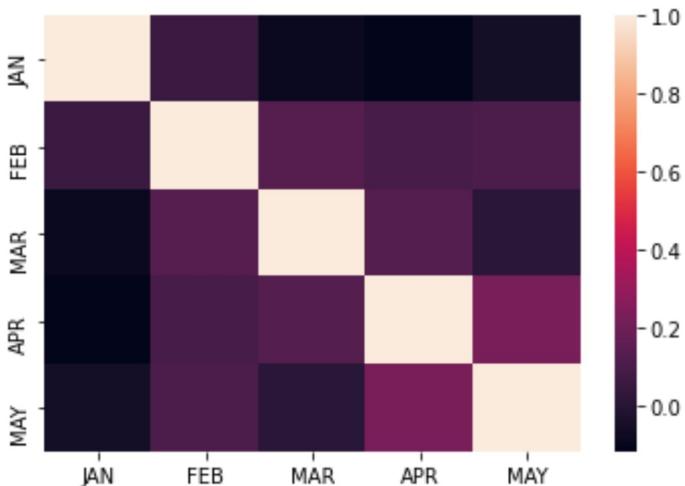
```
    warnings.warn(msg, FutureWarning)
```

Out[249]: &lt;AxesSubplot:xlabel='MAY', ylabel='Density'&gt;



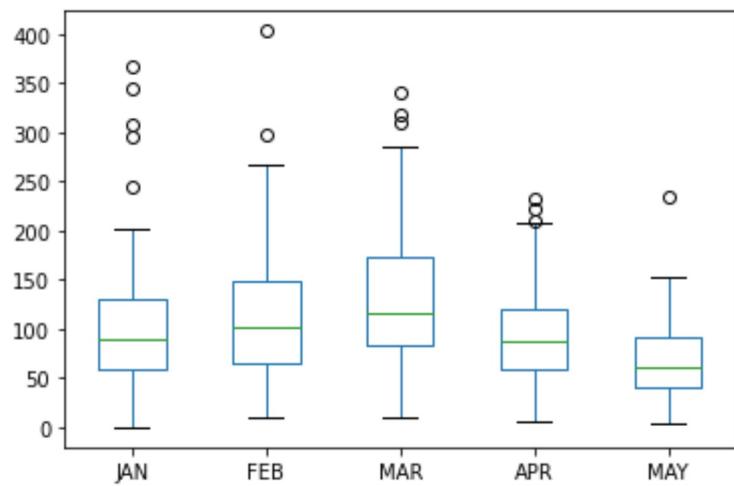
In [250]:

Out[250]: &lt;AxesSubplot:&gt;



In [251]:

Out[251]: &lt;AxesSubplot:&gt;



In [252]:

Out[252]: <AxesSubplot:ylabel='FEB'>

**WEST RAJASTHAN**

In [254]: c=a.head(1932)

Out[254]:

		index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
		0	ANDAMAN & NICOBAR ISLANDS	1901	49.2	87.1	29.2	2.3	528.8	517.5	365.1	481.1	332.6	312.1	250.0	20.0
		1	ANDAMAN & NICOBAR ISLANDS	1902	0.0	159.8	12.2	0.0	446.1	537.1	228.9	753.7	666.2	119.1	11.1	1.1
		2	ANDAMAN & NICOBAR ISLANDS	1903	12.7	144.0	0.0	1.0	235.1	479.9	728.4	326.7	339.0	11.1	1.1	1.1
		3	ANDAMAN & NICOBAR ISLANDS	1904	9.4	14.7	0.0	202.4	304.5	495.1	502.0	160.1	820.4	2.1	1.1	1.1
		4	ANDAMAN & NICOBAR ISLANDS	1905	1.3	0.0	3.3	26.9	279.5	628.7	368.7	330.5	297.0	2.1	1.1	1.1
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1927	1927	WEST RAJASTHAN	2011	0.0	11.8	1.5	1.5	7.8	24.4	88.5	166.8	116.3	1.1	1.1	1.1
	1928	1928	WEST RAJASTHAN	2012	0.5	0.0	0.0	9.5	10.4	5.3	40.4	166.7	92.0	1.1	1.1	1.1
	1929	1929	WEST RAJASTHAN	2013	8.6	21.8	4.2	3.1	1.7	37.6	104.5	138.2	58.7	1.1	1.1	1.1
	1930	1930	WEST RAJASTHAN	2014	0.8	2.2	4.7	8.4	23.0	13.8	94.3	69.6	84.9	1.1	1.1	1.1
	1931	1931	WEST RAJASTHAN	2015	1.4	0.9	30.3	25.2	15.5	53.2	234.6	60.5	35.7	1.1	1.1	1.1

1932 rows × 20 columns

In [257]: `d=c.tail(115)`

Out[257]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1817	1817	WEST RAJASTHAN	1901	6.7	0.0	1.1	0.0	6.1	3.0	79.0	59.2	1.0	2.1
1818	1818	WEST RAJASTHAN	1902	0.0	0.0	0.0	0.5	4.0	49.1	27.0	71.3	41.8	1.8
1819	1819	WEST RAJASTHAN	1903	1.7	1.3	5.5	0.0	4.2	2.7	154.8	87.1	49.3	0.1
1820	1820	WEST RAJASTHAN	1904	3.8	2.9	16.3	0.7	11.4	14.6	39.8	45.6	21.4	1.4
1821	1821	WEST RAJASTHAN	1905	6.3	4.8	0.7	1.3	0.3	4.9	30.1	0.6	64.5	0.0
...	...	...	...	...	...	...	...	...	...	...	...	...	...
1927	1927	WEST RAJASTHAN	2011	0.0	11.8	1.5	1.5	7.8	24.4	88.5	166.8	116.3	0.1
1928	1928	WEST RAJASTHAN	2012	0.5	0.0	0.0	9.5	10.4	5.3	40.4	166.7	92.0	1.9
1929	1929	WEST RAJASTHAN	2013	8.6	21.8	4.2	3.1	1.7	37.6	104.5	138.2	58.7	10.1
1930	1930	WEST RAJASTHAN	2014	0.8	2.2	4.7	8.4	23.0	13.8	94.3	69.6	84.9	0.5
1931	1931	WEST RAJASTHAN	2015	1.4	0.9	30.3	25.2	15.5	53.2	234.6	60.5	35.7	1.1

115 rows × 20 columns

In [258]: `e=d[['JAN', 'FEB', 'MAR','APR','MAY']]`

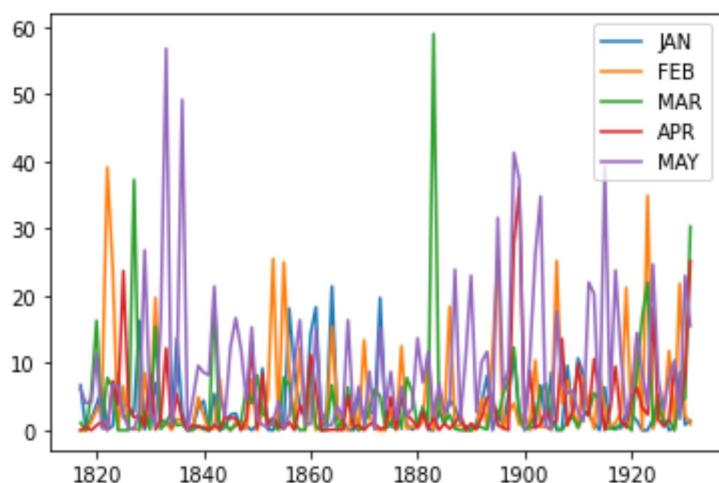
Out[258]:

	JAN	FEB	MAR	APR	MAY
1817	6.7	0.0	1.1	0.0	6.1
1818	0.0	0.0	0.0	0.5	4.0
1819	1.7	1.3	5.5	0.0	4.2
1820	3.8	2.9	16.3	0.7	11.4
1821	6.3	4.8	0.7	1.3	0.3
...	...	...	...	...	...
1927	0.0	11.8	1.5	1.5	7.8
1928	0.5	0.0	0.0	9.5	10.4
1929	8.6	21.8	4.2	3.1	1.7
1930	0.8	2.2	4.7	8.4	23.0
1931	1.4	0.9	30.3	25.2	15.5

115 rows × 5 columns

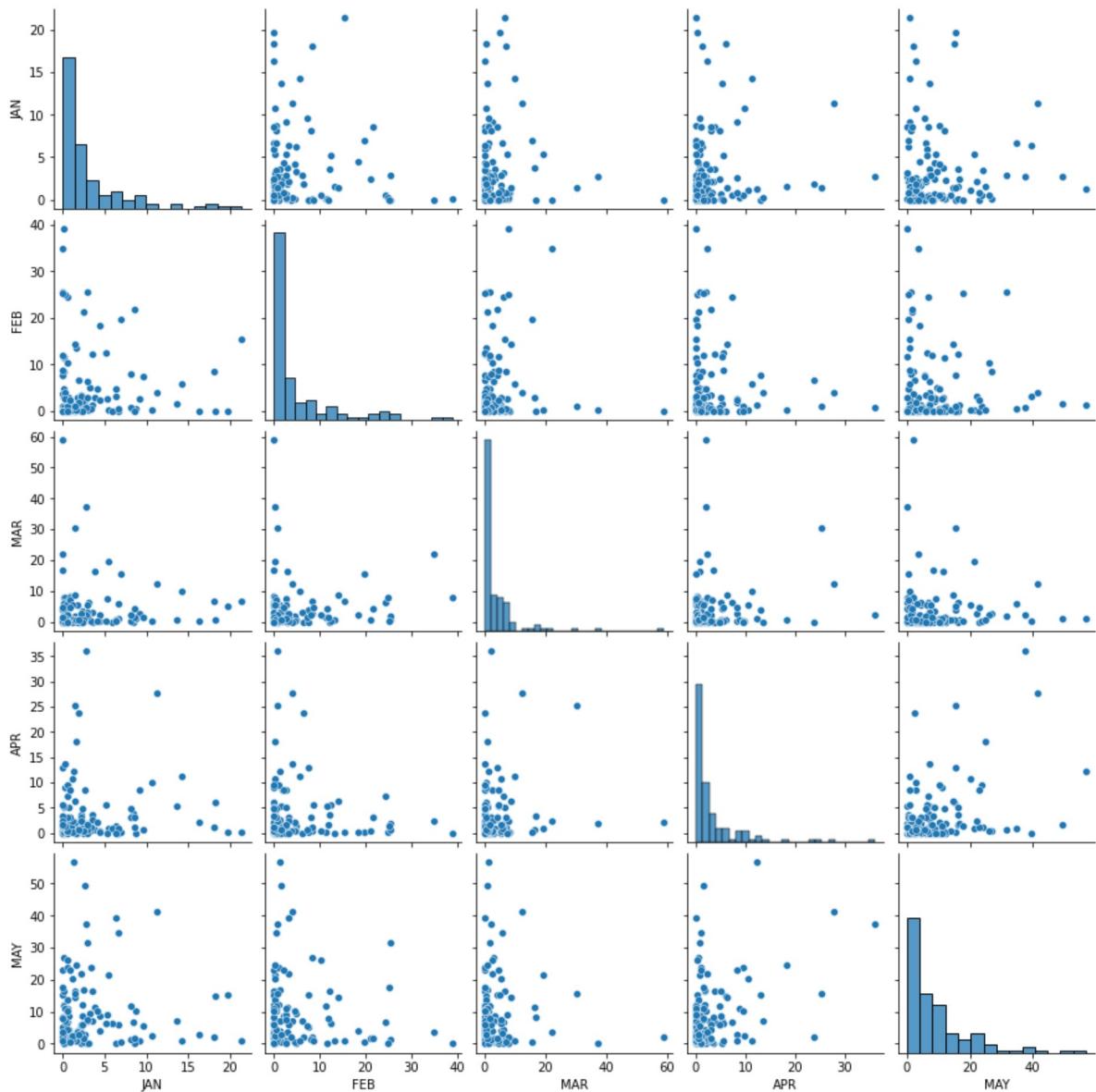
In [259]:

Out[259]: <AxesSubplot:>



In [260]:

Out[260]: &lt;seaborn.axisgrid.PairGrid at 0x2278071a070&gt;

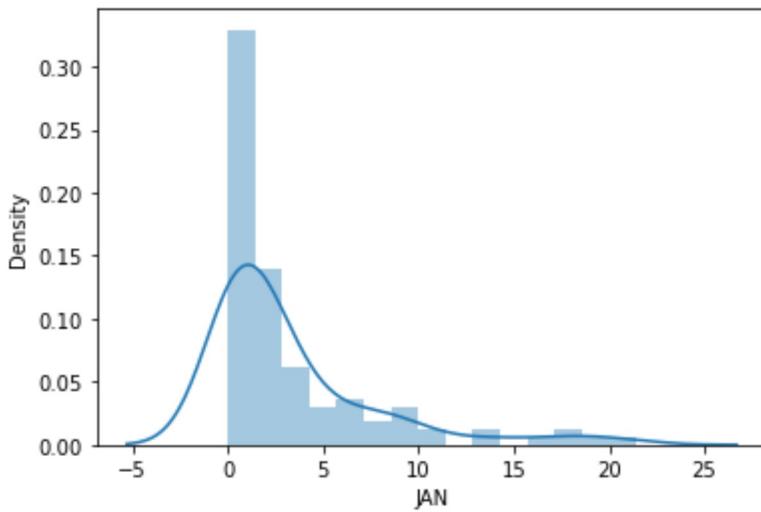


In [261]:

```
C:\ProgramData\Anaconda3\lib\site-packages\seaborn\distributions.py:2557: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).
```

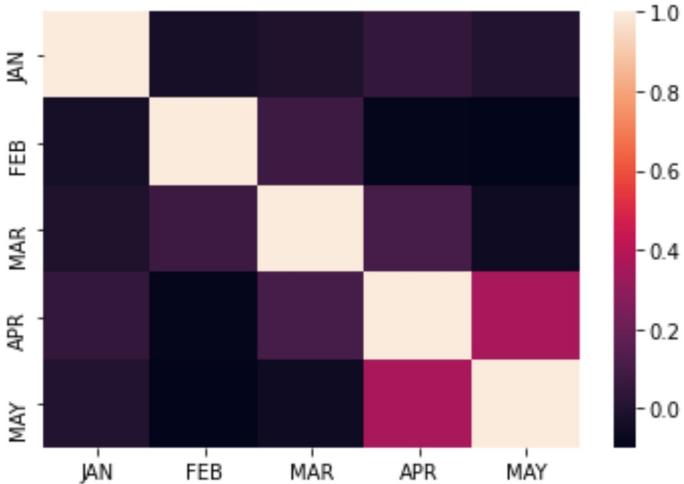
```
    warnings.warn(msg, FutureWarning)
```

Out[261]: &lt;AxesSubplot:xlabel='JAN', ylabel='Density'&gt;

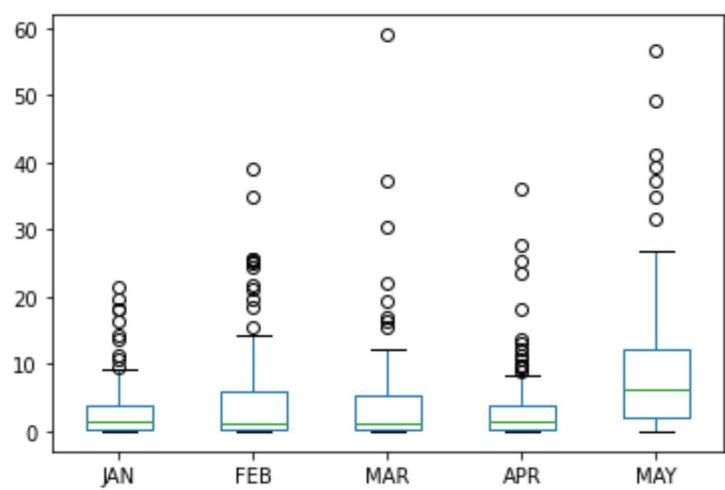


In [262]:

Out[262]: &lt;AxesSubplot:&gt;

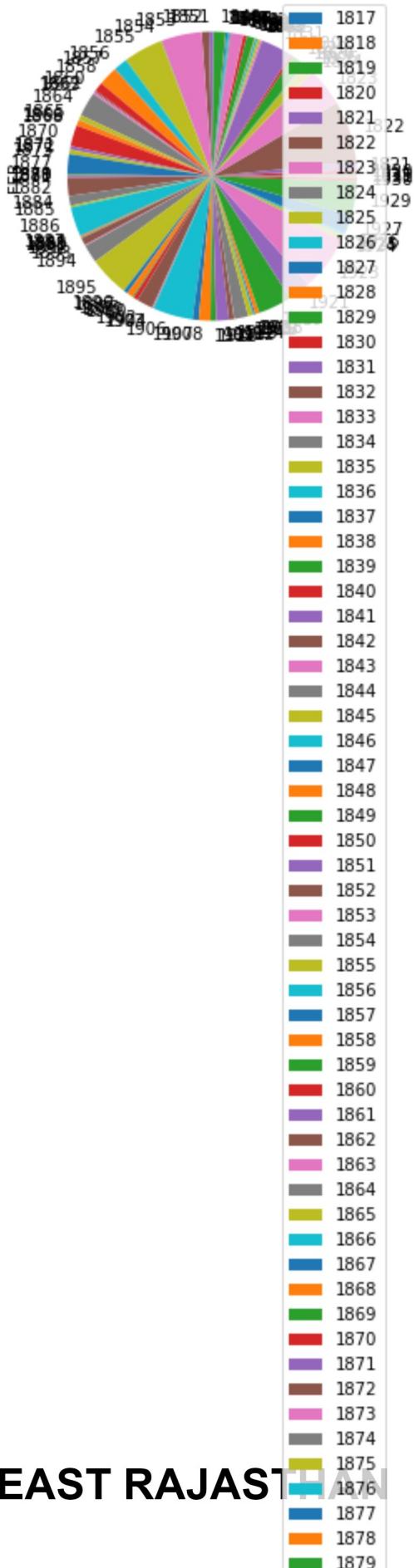


Out[263]: &lt;AxesSubplot:&gt;



In [264]:

Out[264]: <AxesSubplot:ylabel='FEB'>



In [267]: `c=a.head(2047)`

Out[267]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0	0	ANDAMAN & NICOBAR ISLANDS	1901	49.2	87.1	29.2	2.3	528.8	517.5	365.1	481.1	332.6	311.1	259.1	210.1
1	1	ANDAMAN & NICOBAR ISLANDS	1902	0.0	159.8	12.2	0.0	446.1	537.1	228.9	753.7	666.2	119.1	119.1	119.1
2	2	ANDAMAN & NICOBAR ISLANDS	1903	12.7	144.0	0.0	1.0	235.1	479.9	728.4	326.7	339.0	119.1	119.1	119.1
3	3	ANDAMAN & NICOBAR ISLANDS	1904	9.4	14.7	0.0	202.4	304.5	495.1	502.0	160.1	820.4	210.1	210.1	210.1
4	4	ANDAMAN & NICOBAR ISLANDS	1905	1.3	0.0	3.3	26.9	279.5	628.7	368.7	330.5	297.0	210.1	210.1	210.1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2042	2042	EAST RAJASTHAN	2011	0.0	11.2	0.2	0.5	5.1	140.9	193.6	284.1	166.4	119.1	119.1	119.1
2043	2043	EAST RAJASTHAN	2012	1.9	0.0	0.0	3.6	9.5	11.2	170.5	365.0	131.3	119.1	119.1	119.1
2044	2044	EAST RAJASTHAN	2013	1.4	21.7	0.4	3.2	1.0	90.6	319.0	278.5	88.0	119.1	119.1	119.1
2045	2045	EAST RAJASTHAN	2014	28.4	10.0	6.4	7.3	8.4	23.5	197.1	261.0	136.9	119.1	119.1	119.1
2046	2046	EAST RAJASTHAN	2015	12.1	0.1	55.9	15.9	3.5	96.4	297.6	142.8	20.1	119.1	119.1	119.1

2047 rows × 20 columns

In [270]: `d=c.tail(115)`

Out[270]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1932	1932	EAST RAJASTHAN	1901	21.6	8.9	2.9	0.7	5.0	15.0	164.8	175.6	7.5	9.8
1933	1933	EAST RAJASTHAN	1902	4.1	0.7	0.0	1.8	9.9	34.6	247.6	116.7	145.6	14.4
1934	1934	EAST RAJASTHAN	1903	1.9	0.7	1.3	0.1	12.9	15.6	238.2	229.1	168.5	17.8
1935	1935	EAST RAJASTHAN	1904	4.3	5.5	21.7	0.2	27.5	49.9	289.7	223.5	50.2	1.5
1936	1936	EAST RAJASTHAN	1905	4.1	8.8	3.2	1.6	2.0	14.4	130.5	30.9	83.8	0.0
...	...	...	...	...	...	...	...	...	...	...	...	...	...
2042	2042	EAST RAJASTHAN	2011	0.0	11.2	0.2	0.5	5.1	140.9	193.6	284.1	166.4	0.0
2043	2043	EAST RAJASTHAN	2012	1.9	0.0	0.0	3.6	9.5	11.2	170.5	365.0	131.3	0.5
2044	2044	EAST RAJASTHAN	2013	1.4	21.7	0.4	3.2	1.0	90.6	319.0	278.5	88.0	30.6
2045	2045	EAST RAJASTHAN	2014	28.4	10.0	6.4	7.3	8.4	23.5	197.1	261.0	136.9	3.2
2046	2046	EAST RAJASTHAN	2015	12.1	0.1	55.9	15.9	3.5	96.4	297.6	142.8	20.1	5.0

115 rows × 20 columns

In [271]: `e=d[['JAN', 'FEB', 'MAR','APR','MAY']]`

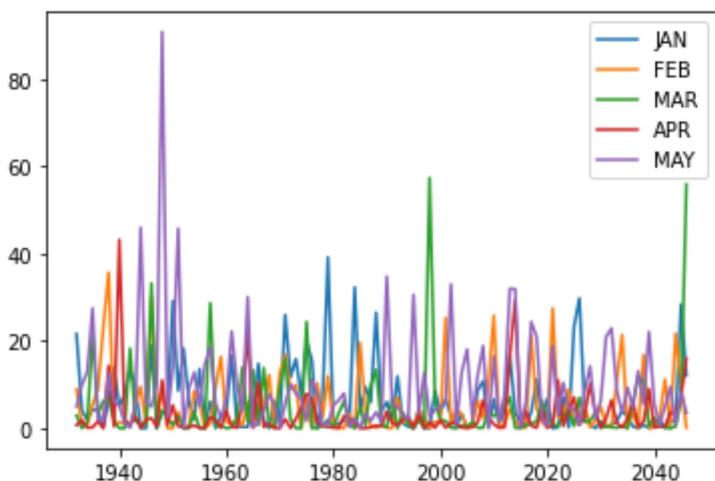
Out[271]:

	JAN	FEB	MAR	APR	MAY
<b>1932</b>	21.6	8.9	2.9	0.7	5.0
<b>1933</b>	4.1	0.7	0.0	1.8	9.9
<b>1934</b>	1.9	0.7	1.3	0.1	12.9
<b>1935</b>	4.3	5.5	21.7	0.2	27.5
<b>1936</b>	4.1	8.8	3.2	1.6	2.0
...	...	...	...	...	...
<b>2042</b>	0.0	11.2	0.2	0.5	5.1
<b>2043</b>	1.9	0.0	0.0	3.6	9.5
<b>2044</b>	1.4	21.7	0.4	3.2	1.0
<b>2045</b>	28.4	10.0	6.4	7.3	8.4
<b>2046</b>	12.1	0.1	55.9	15.9	3.5

115 rows × 5 columns

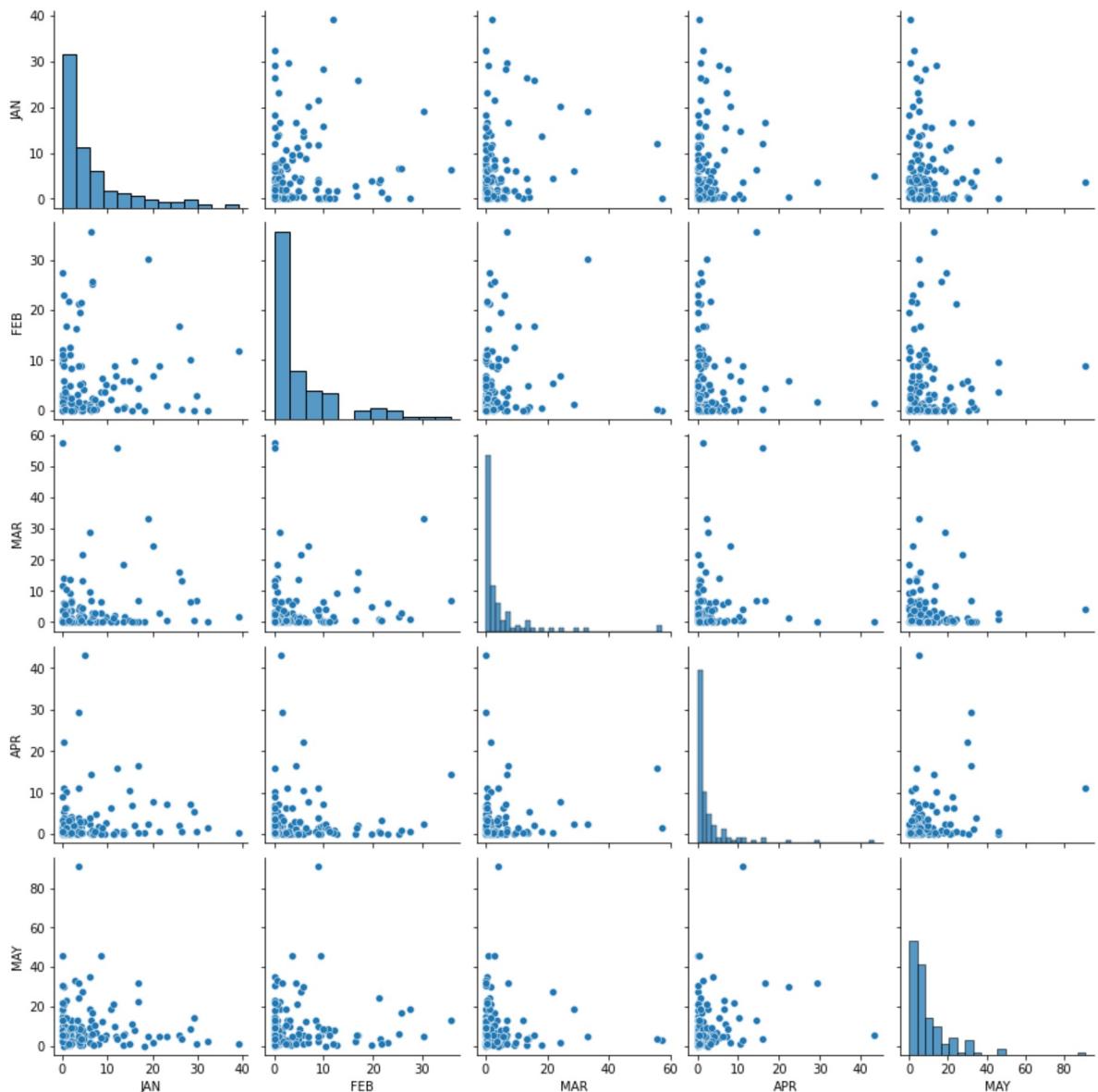
In [272]:

Out[272]: <AxesSubplot:>



In [273]:

Out[273]: &lt;seaborn.axisgrid.PairGrid at 0x22782e80610&gt;

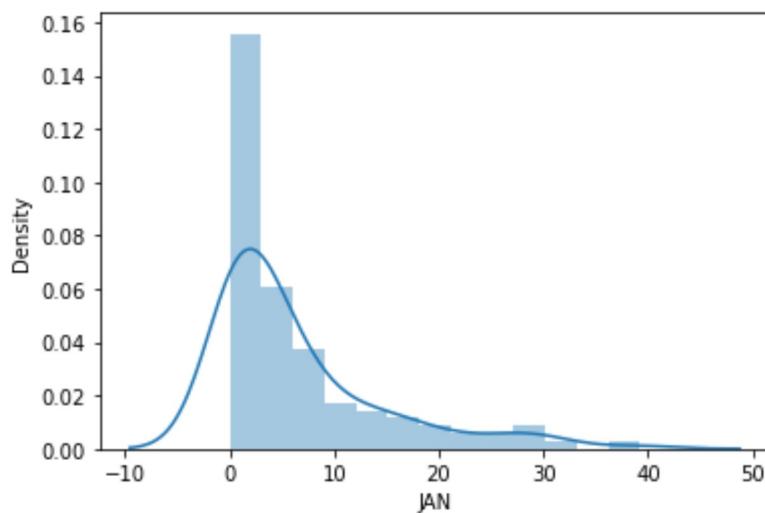


In [274]:

```
C:\ProgramData\Anaconda3\lib\site-packages\seaborn\distributions.py:2557: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).
```

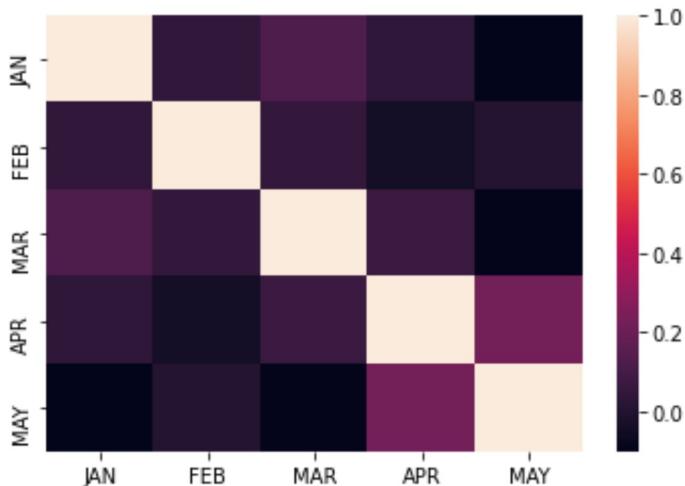
```
    warnings.warn(msg, FutureWarning)
```

Out[274]: &lt;AxesSubplot:xlabel='JAN', ylabel='Density'&gt;



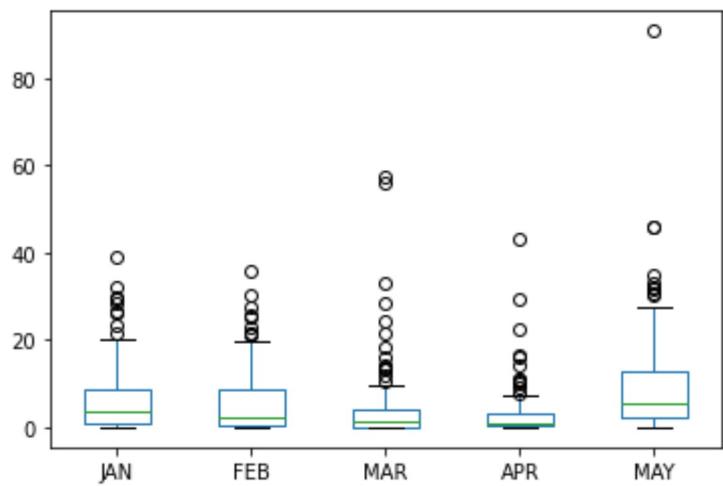
In [275]:

Out[275]: &lt;AxesSubplot:&gt;



In [276]:

Out[276]: &lt;AxesSubplot:&gt;



In [277]:

Out[277]: <AxesSubplot:ylabel='FEB'>

In [ ]:

