

```
In [2]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

```
In [3]: df = pd.read_csv(r"C:\Users\user\Downloads\New folder\NAGA MANI MIZO TRIPURA.csv")
df
```

Out[3]:

	index	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OC
0	323	NAGA MANI MIZO TRIPURA	1902	4.8	0.5	36.3	297.8	215.5	480.1	392.4	312.8	318.7	102.
1	324	NAGA MANI MIZO TRIPURA	1903	6.5	40.5	139.8	45.5	159.9	458.6	300.2	470.6	366.1	166.
2	325	NAGA MANI MIZO TRIPURA	1904	2.3	46.9	47.5	290.3	230.5	455.3	423.5	423.6	375.8	128.
3	326	NAGA MANI MIZO TRIPURA	1905	9.1	35.3	306.5	161.7	193.6	339.7	450.1	429.9	320.1	246.
4	327	NAGA MANI MIZO TRIPURA	1906	7.0	71.5	72.5	99.0	302.7	417.4	475.2	439.2	439.1	142.
...
109	432	NAGA MANI MIZO TRIPURA	2011	12.6	3.6	51.4	81.1	334.9	374.2	313.3	367.6	258.3	92.
110	433	NAGA MANI MIZO TRIPURA	2012	24.5	10.2	20.3	243.5	163.5	396.2	280.1	342.7	248.7	160.
111	434	NAGA MANI MIZO TRIPURA	2013	0.2	5.7	19.7	60.3	348.9	206.6	255.9	291.3	241.4	125.
112	435	NAGA MANI MIZO TRIPURA	2014	1.2	21.0	25.4	49.6	192.5	268.3	295.7	372.3	300.9	69.
113	436	NAGA MANI MIZO TRIPURA	2015	14.4	14.2	21.6	253.5	198.3	283.9	413.6	334.2	255.9	118.

114 rows × 20 columns



```
In [5]: df=df.dropna()
```

```
In [6]: df.columns
```

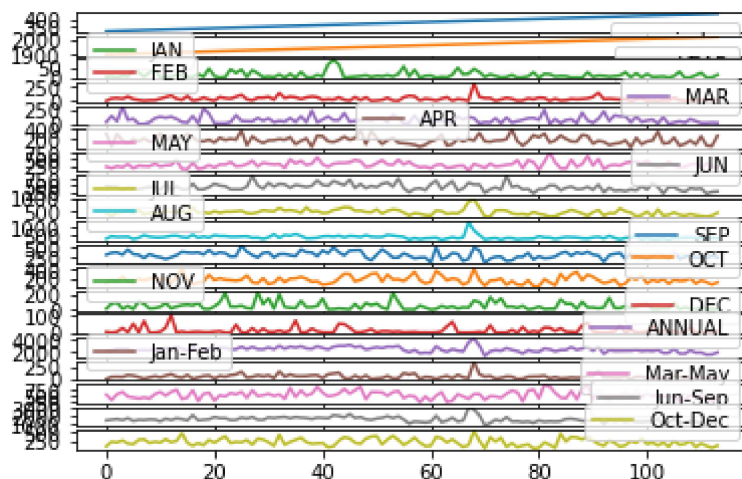
```
Out[6]: Index(['index', 'SUBDIVISION', 'YEAR', 'JAN', 'FEB', 'MAR', 'APR', 'MAY',  
              'JUN', 'JUL', 'AUG', 'SEP', 'OCT', 'NOV', 'DEC', 'ANNUAL', 'Jan-Feb',  
              'Mar-May', 'Jun-Sep', 'Oct-Dec'],  
             dtype='object')
```

```
In [4]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>  
RangeIndex: 114 entries, 0 to 113  
Data columns (total 20 columns):  
#   Column                Non-Null Count  Dtype  
---  ---  
0   index                 114 non-null   int64  
1   SUBDIVISION           114 non-null   object  
2   YEAR                  114 non-null   int64  
3   JAN                   114 non-null   float64  
4   FEB                   114 non-null   float64  
5   MAR                   114 non-null   float64  
6   APR                   114 non-null   float64  
7   MAY                   114 non-null   float64  
8   JUN                   114 non-null   float64  
9   JUL                   114 non-null   float64  
10  AUG                   114 non-null   float64  
11  SEP                   114 non-null   float64  
12  OCT                   114 non-null   float64  
13  NOV                   114 non-null   float64  
14  DEC                   114 non-null   float64  
15  ANNUAL                114 non-null   float64  
16  Jan-Feb               114 non-null   float64  
17  Mar-May               114 non-null   float64  
18  Jun-Sep               114 non-null   float64  
19  Oct-Dec               114 non-null   float64  
dtypes: float64(17), int64(2), object(1)  
memory usage: 17.9+ KB
```

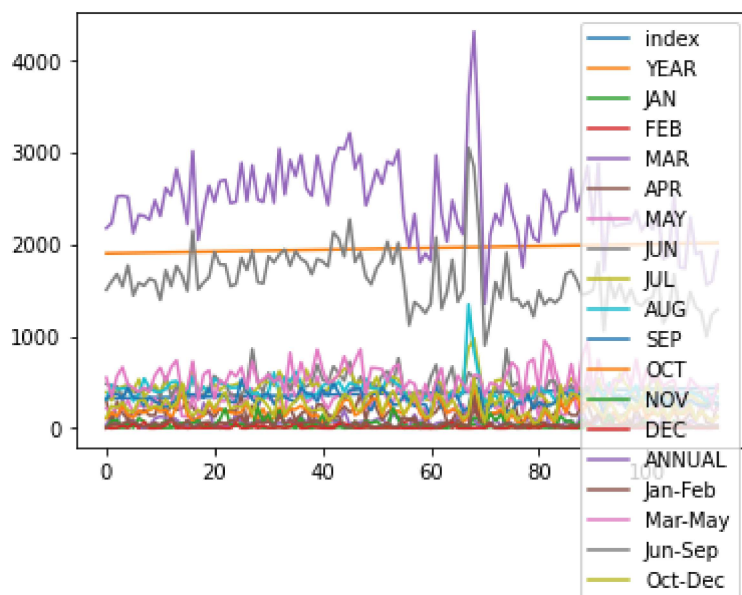
```
In [7]: df.plot.line(subplots=True)
```

```
Out[7]: array([<AxesSubplot:~>, <AxesSubplot:~>, <AxesSubplot:~>, <AxesSubplot:~>,
<AxesSubplot:~>, <AxesSubplot:~>, <AxesSubplot:~>, <AxesSubplot:~>,
<AxesSubplot:~>, <AxesSubplot:~>, <AxesSubplot:~>, <AxesSubplot:~>,
<AxesSubplot:~>, <AxesSubplot:~>, <AxesSubplot:~>], dtype=object)
```



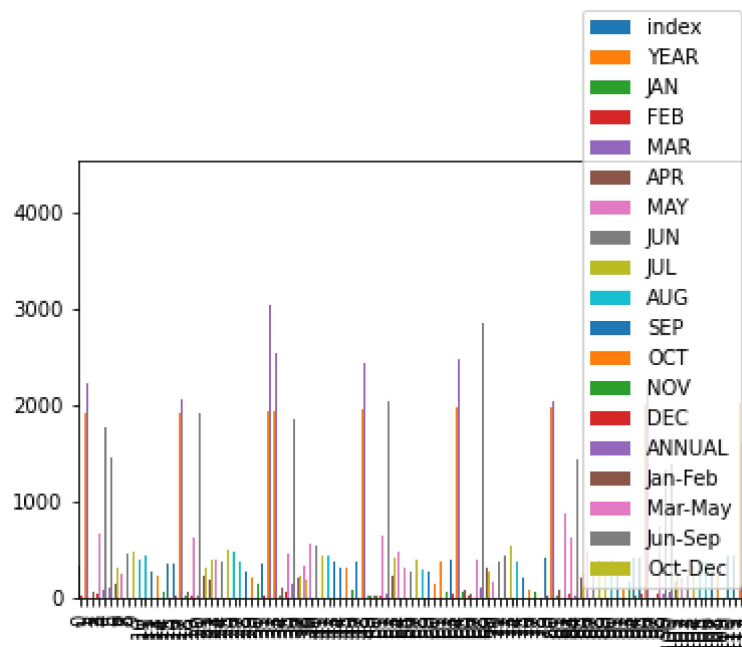
```
In [8]: df.plot.line()
```

```
Out[8]: <AxesSubplot:~>
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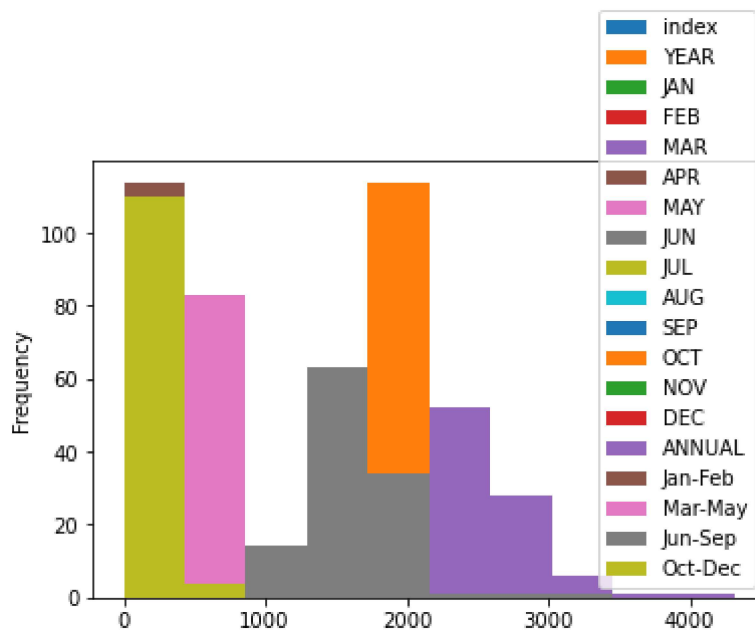
```
In [9]: df.plot.bar()
```

```
Out[9]: <AxesSubplot:>
```



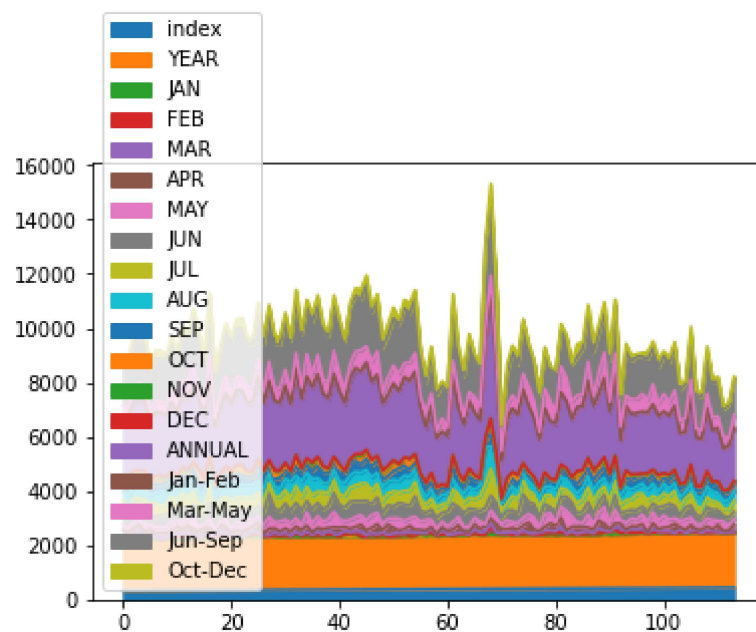
```
In [10]: df.plot.hist()
```

```
Out[10]: <AxesSubplot:ylabel='Frequency'>
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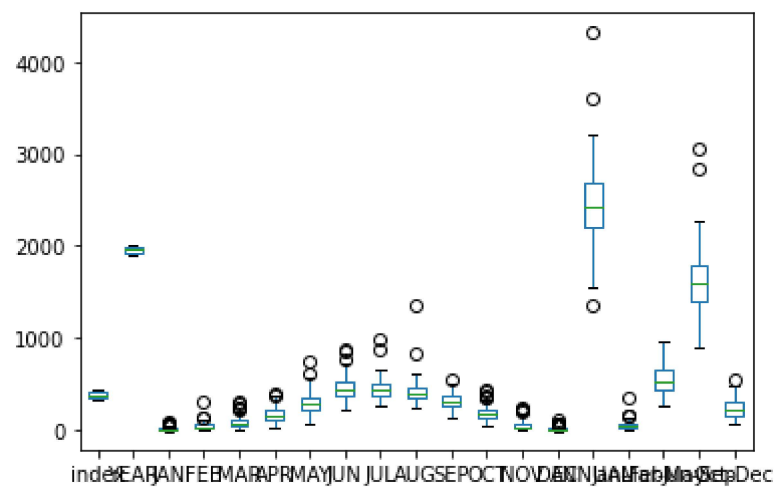
```
In [11]: df.plot.area()
```

```
Out[11]: <AxesSubplot:>
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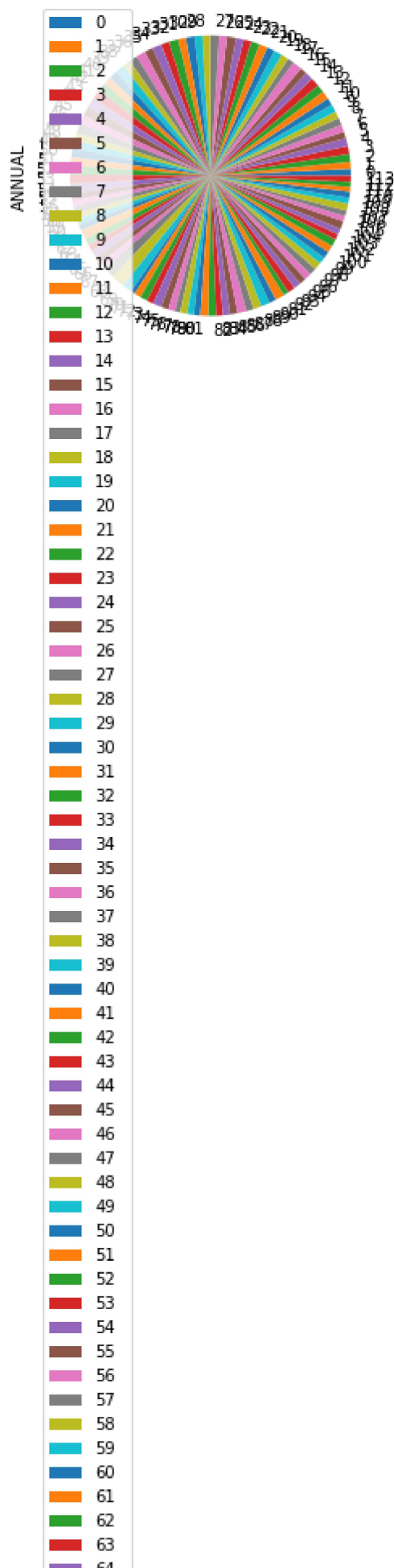
```
In [12]: df.plot.box()
```

```
Out[12]: <AxesSubplot:>
```



```
In [13]: df.plot.pie(y='ANNUAL')
```

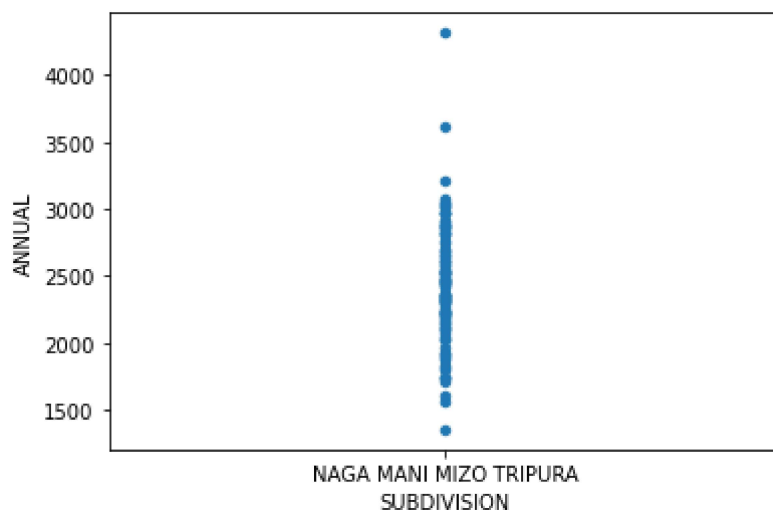
```
Out[13]: <AxesSubplot:ylabel='ANNUAL'>
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```
In [14]: df.plot.scatter(x='SUBDIVISION',y='ANNUAL')
```

```
Out[14]: <AxesSubplot:xlabel='SUBDIVISION', ylabel='ANNUAL'>
```

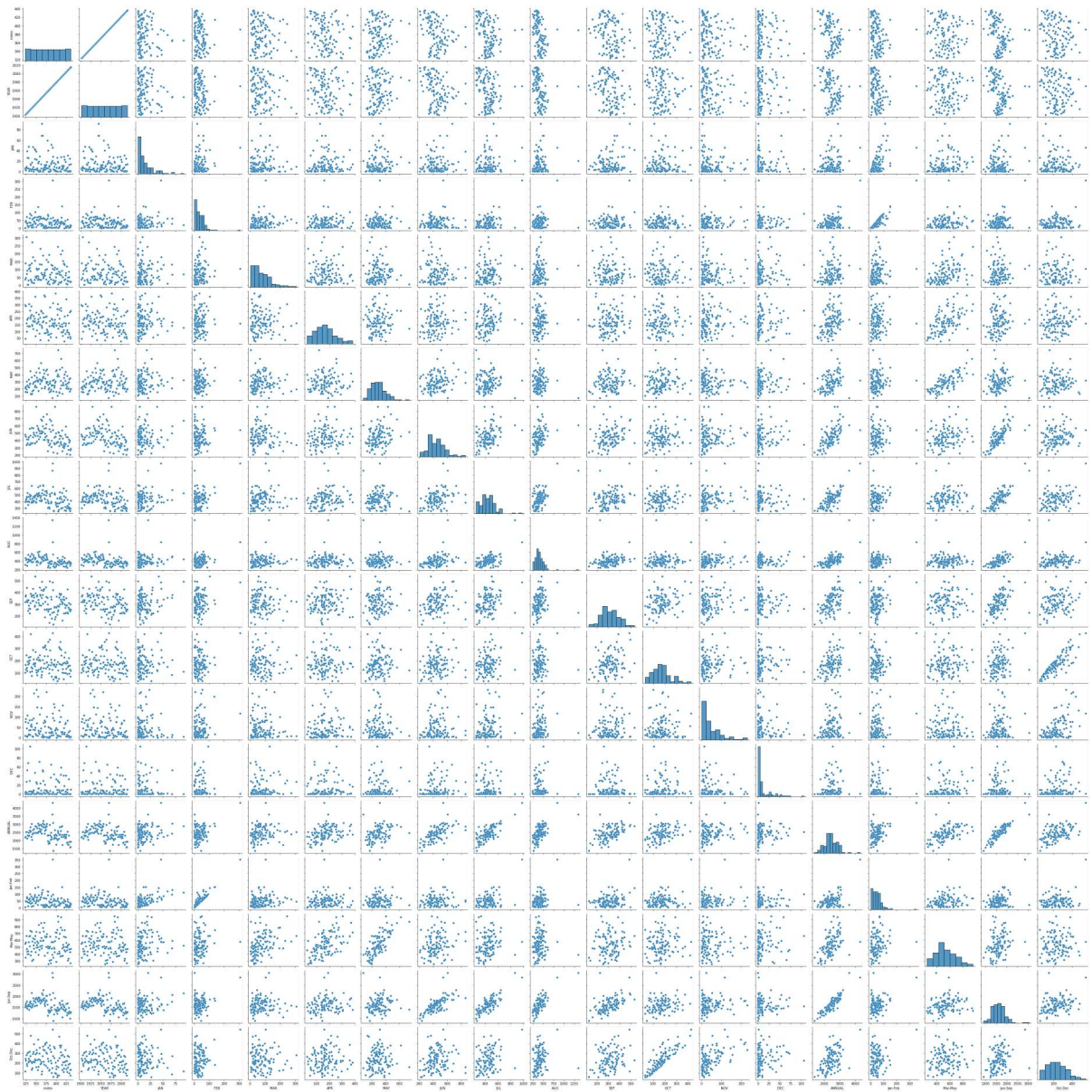


```
In [15]: df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 114 entries, 0 to 113
Data columns (total 20 columns):
 #   Column          Non-Null Count  Dtype
---  -
 0   index           114 non-null   int64
 1   SUBDIVISION     114 non-null   object
 2   YEAR            114 non-null   int64
 3   JAN             114 non-null   float64
 4   FEB             114 non-null   float64
 5   MAR             114 non-null   float64
 6   APR             114 non-null   float64
 7   MAY             114 non-null   float64
 8   JUN             114 non-null   float64
 9   JUL             114 non-null   float64
10  AUG             114 non-null   float64
11  SEP             114 non-null   float64
12  OCT             114 non-null   float64
13  NOV             114 non-null   float64
14  DEC             114 non-null   float64
15  ANNUAL          114 non-null   float64
16  Jan-Feb        114 non-null   float64
17  Mar-May        114 non-null   float64
18  Jun-Sep        114 non-null   float64
19  Oct-Dec        114 non-null   float64
dtypes: float64(17), int64(2), object(1)
memory usage: 18.7+ KB
```

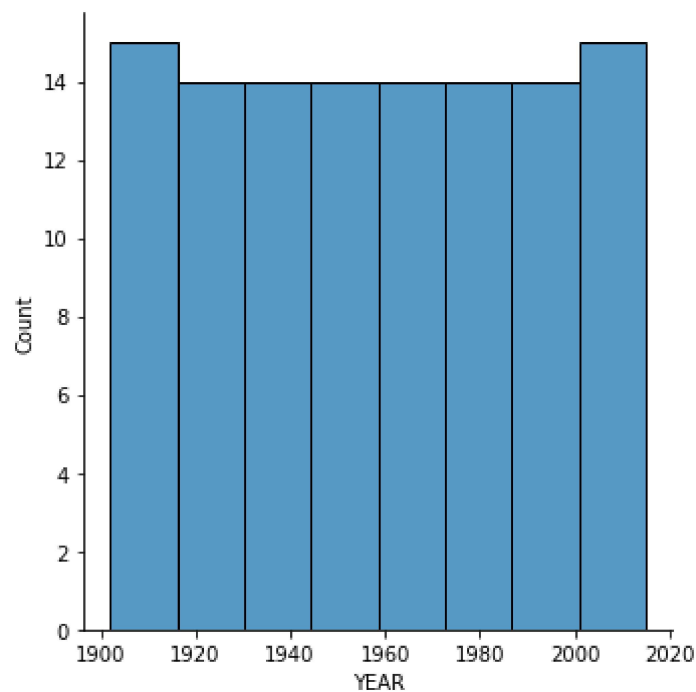
```
In [16]: sns.pairplot(df)
```

```
Out[16]: <seaborn.axisgrid.PairGrid at 0x23a09d22e50>
```



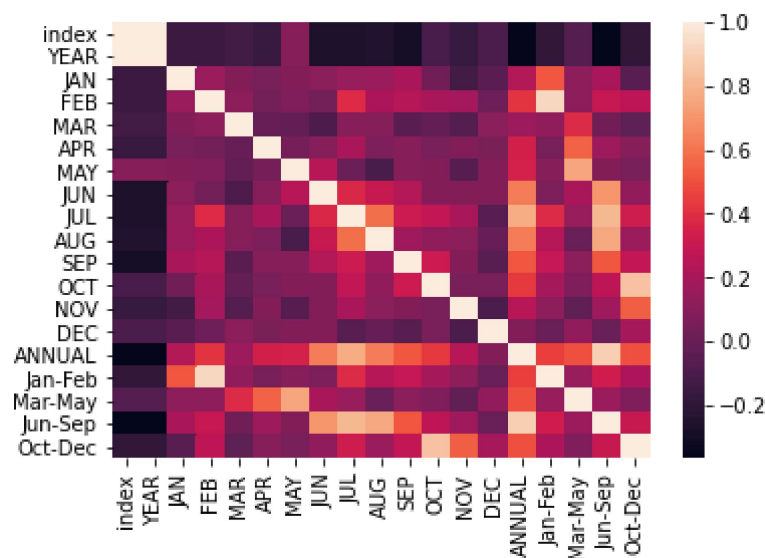
```
In [17]: sns.displot(df['YEAR'])
```

```
Out[17]: <seaborn.axisgrid.FacetGrid at 0x23a16f29d60>
```



```
In [18]: sns.heatmap(df.corr())
```

```
Out[18]: <AxesSubplot:>
```



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In [ ]:
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