

In [54]:

```
import pandas as pd
```

In [55]:

```
data=pd.read_csv("/home/placement/Downloads//arunachal.csv")
```

In [56]:

```
data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 91 entries, 0 to 90
Data columns (total 20 columns):
#   Column                Non-Null Count  Dtype
---  -
0   Unnamed: 0            91 non-null    int64
1   SUBDIVISION           91 non-null    object
2   YEAR                  91 non-null    int64
3   JAN                   90 non-null    float64
4   FEB                   90 non-null    float64
5   MAR                   89 non-null    float64
6   APR                   91 non-null    float64
7   MAY                   91 non-null    float64
8   JUN                   90 non-null    float64
9   JUL                   90 non-null    float64
10  AUG                   91 non-null    float64
11  SEP                   91 non-null    float64
12  OCT                   89 non-null    float64
13  NOV                   89 non-null    float64
14  DEC                   89 non-null    float64
15  ANNUAL                85 non-null    float64
16  Jan-Feb              90 non-null    float64
17  Mar-May              89 non-null    float64
18  Jun-Sep              89 non-null    float64
19  Oct-Dec              88 non-null    float64
dtypes: float64(17), int64(2), object(1)
memory usage: 14.3+ KB
```

In [57]:

```
list(data)
```

Out[57]:

```
['Unnamed: 0',
 'SUBDIVISION',
 'YEAR',
 'JAN',
 'FEB',
 'MAR',
 'APR',
 'MAY',
 'JUN',
 'JUL',
 'AUG',
 'SEP',
 'OCT',
 'NOV',
 'DEC',
 'ANNUAL',
 'Jan-Feb',
 'Mar-May',
 'Jun-Sep',
 'Oct-Dec']
```

In [58]:

```
data.head()
```

Out[58]:

	Unnamed: 0	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	S
0	110	ARUNACHAL PRADESH	1916	48.1	69.8	71.1	316.1	424.6	1124.9	NaN	629.7	33
1	111	ARUNACHAL PRADESH	1917	21.4	164.5	NaN	269.6	107.9	823.8	909.1	628.4	41
2	112	ARUNACHAL PRADESH	1918	10.4	11.0	191.2	144.6	861.1	1609.9	1303.0	692.6	51
3	113	ARUNACHAL PRADESH	1919	34.5	67.8	28.5	256.9	420.6	973.6	999.0	286.7	62
4	114	ARUNACHAL PRADESH	1920	14.0	196.3	605.6	364.7	173.6	840.6	535.4	896.5	37

In [59]:

```
data.isna().sum()
```

Out[59]:

```
Unnamed: 0      0
SUBDIVISION     0
YEAR            0
JAN             1
FEB             1
MAR             2
APR             0
MAY             0
JUN             1
JUL             1
AUG             0
SEP             0
OCT             2
NOV             2
DEC             2
ANNUAL          6
Jan-Feb         1
Mar-May         2
Jun-Sep         2
Oct-Dec         3
dtype: int64
```

In [60]:

```
data1=data.drop(['JUL'],axis=1)
```

In [61]:

```
data1
```

Out[61]:

	Unnamed: 0	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	AUG	SEP	C
0	110	ARUNACHAL PRADESH	1916	48.1	69.8	71.1	316.1	424.6	1124.9	629.7	333.9	M
1	111	ARUNACHAL PRADESH	1917	21.4	164.5	NaN	269.6	107.9	823.8	628.4	411.5	19
2	112	ARUNACHAL PRADESH	1918	10.4	11.0	191.2	144.6	861.1	1609.9	692.6	515.8	12
3	113	ARUNACHAL PRADESH	1919	34.5	67.8	28.5	256.9	420.6	973.6	286.7	628.7	94
4	114	ARUNACHAL PRADESH	1920	14.0	196.3	605.6	364.7	173.6	840.6	896.5	376.7	10
...	
86	196	ARUNACHAL PRADESH	2005	48.4	167.6	229.5	195.3	179.8	269.3	400.0	243.6	13
87	197	ARUNACHAL PRADESH	2006	6.0	103.7	63.3	202.7	321.7	520.4	227.6	263.2	7
88	198	ARUNACHAL PRADESH	2007	13.4	97.4	48.1	292.4	250.4	530.2	364.6	529.3	10
89	199	ARUNACHAL PRADESH	2008	76.7	39.7	122.6	192.4	185.0	423.6	439.3	189.7	11
90	200	ARUNACHAL PRADESH	2009	18.0	92.8	72.1	132.7	189.9	259.1	370.3	152.5	8

91 rows × 19 columns



In [62]:

data

Out[62]:

Unnamed: 0		SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
0	110	ARUNACHAL PRADESH	1916	48.1	69.8	71.1	316.1	424.6	1124.9	NaN	629.7	3
1	111	ARUNACHAL PRADESH	1917	21.4	164.5	NaN	269.6	107.9	823.8	909.1	628.4	4
2	112	ARUNACHAL PRADESH	1918	10.4	11.0	191.2	144.6	861.1	1609.9	1303.0	692.6	5
3	113	ARUNACHAL PRADESH	1919	34.5	67.8	28.5	256.9	420.6	973.6	999.0	286.7	6
4	114	ARUNACHAL PRADESH	1920	14.0	196.3	605.6	364.7	173.6	840.6	535.4	896.5	3
...
86	196	ARUNACHAL PRADESH	2005	48.4	167.6	229.5	195.3	179.8	269.3	430.8	400.0	2
87	197	ARUNACHAL PRADESH	2006	6.0	103.7	63.3	202.7	321.7	520.4	382.2	227.6	2
88	198	ARUNACHAL PRADESH	2007	13.4	97.4	48.1	292.4	250.4	530.2	761.0	364.6	5
89	199	ARUNACHAL PRADESH	2008	76.7	39.7	122.6	192.4	185.0	423.6	456.1	439.3	1
90	200	ARUNACHAL PRADESH	2009	18.0	92.8	72.1	132.7	189.9	259.1	329.9	370.3	1

91 rows × 20 columns

In [63]:

data=data.fillna(data.median())

/tmp/ipykernel_6131/495656529.py:1: FutureWarning: The default value of numeric_only in DataFrame.median is deprecated. In a future version, it will default to False. In addition, specifying 'numeric_only=None' is deprecated. Select only valid columns or specify the value of numeric_only to silence this warning.
data=data.fillna(data.median())

In [64]:

```
data.isna().sum()
```

Out[64]:

Unnamed: 0	0
SUBDIVISION	0
YEAR	0
JAN	0
FEB	0
MAR	0
APR	0
MAY	0
JUN	0
JUL	0
AUG	0
SEP	0
OCT	0
NOV	0
DEC	0
ANNUAL	0
Jan-Feb	0
Mar-May	0
Jun-Sep	0
Oct-Dec	0

dtype: int64

In [65]:

data

Out[65]:

	Unnamed: 0	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	
0	110	ARUNACHAL PRADESH	1916	48.1	69.8	71.1	316.1	424.6	1124.9	613.0	629.7	3
1	111	ARUNACHAL PRADESH	1917	21.4	164.5	141.7	269.6	107.9	823.8	909.1	628.4	4
2	112	ARUNACHAL PRADESH	1918	10.4	11.0	191.2	144.6	861.1	1609.9	1303.0	692.6	5
3	113	ARUNACHAL PRADESH	1919	34.5	67.8	28.5	256.9	420.6	973.6	999.0	286.7	6
4	114	ARUNACHAL PRADESH	1920	14.0	196.3	605.6	364.7	173.6	840.6	535.4	896.5	3
...	
86	196	ARUNACHAL PRADESH	2005	48.4	167.6	229.5	195.3	179.8	269.3	430.8	400.0	2
87	197	ARUNACHAL PRADESH	2006	6.0	103.7	63.3	202.7	321.7	520.4	382.2	227.6	2
88	198	ARUNACHAL PRADESH	2007	13.4	97.4	48.1	292.4	250.4	530.2	761.0	364.6	5
89	199	ARUNACHAL PRADESH	2008	76.7	39.7	122.6	192.4	185.0	423.6	456.1	439.3	1
90	200	ARUNACHAL PRADESH	2009	18.0	92.8	72.1	132.7	189.9	259.1	329.9	370.3	1

91 rows × 20 columns



In [66]:

```
data.sum()
```

Out[66]:

Unnamed: 0	14105
SUBDIVISION	ARUNACHAL PRADESHARUNACHAL PRADESHARUNACHAL PR...
YEAR	178610
JAN	4419.3
FEB	8544.6
MAR	14029.1
APR	23932.1
MAY	33183.3
JUN	59905.85
JUL	64689.7
AUG	45696.9
SEP	39427.9
OCT	18186.3
NOV	3278.7
DEC	2249.9
ANNUAL	316011.9
Jan-Feb	12962.0
Mar-May	71253.6
Jun-Sep	210017.3
Oct-Dec	23659.75
dtype:	object

In []: