In [1]:
```
import pandas as pd
```

In [2]:
```
data=pd.read_csv("/home/placement/Downloads/arunachal.csv")
```

In [3]:
```
data
```

Out[3]:

	Unnamed: 0	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	Jan-Feb	Mar-May
0	110	ARUNACHAL PRADESH	1916	48.1	69.8	71.1	316.1	424.6	1124.9	NaN	629.7	333.9	NaN	NaN	NaN	NaN	117.9	811.8
1	111	ARUNACHAL PRADESH	1917	21.4	164.5	NaN	269.6	107.9	823.8	909.1	628.4	411.5	199.3	63.5	0.0	NaN	185.9	NaN
2	112	ARUNACHAL PRADESH	1918	10.4	11.0	191.2	144.6	861.1	1609.9	1303.0	692.6	515.8	125.2	7.8	13.7	5486.3	21.4	1196.9
3	113	ARUNACHAL PRADESH	1919	34.5	67.8	28.5	256.9	420.6	973.6	999.0	286.7	628.7	948.3	40.7	8.6	4693.9	102.3	706.0
4	114	ARUNACHAL PRADESH	1920	14.0	196.3	605.6	364.7	173.6	840.6	535.4	896.5	376.7	103.3	0.0	0.0	4106.7	210.3	1143.9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
86	196	ARUNACHAL PRADESH	2005	48.4	167.6	229.5	195.3	179.8	269.3	430.8	400.0	243.6	139.3	28.6	3.3	2335.5	216.0	604.6
87	197	ARUNACHAL PRADESH	2006	6.0	103.7	63.3	202.7	321.7	520.4	382.2	227.6	263.2	77.2	69.7	21.7	2259.6	109.7	587.7
88	198	ARUNACHAL PRADESH	2007	13.4	97.4	48.1	292.4	250.4	530.2	761.0	364.6	529.3	102.6	24.3	6.9	3020.7	110.8	590.9
89	199	ARUNACHAL PRADESH	2008	76.7	39.7	122.6	192.4	185.0	423.6	456.1	439.3	189.7	115.1	1.7	2.6	2244.4	116.4	499.9
90	200	ARUNACHAL PRADESH	2009	18.0	92.8	72.1	132.7	189.9	259.1	329.9	370.3	152.5	82.9	33.9	15.9	1749.9	110.8	394.7

91 rows × 20 columns

In [4]:
```
list(data)
```

Out[4]:
```
['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 [7]:
```
data1=data.drop(['Unnamed: 0'],axis=1)
```

In [8]:
```
data1.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 91 entries, 0 to 90
Data columns (total 19 columns):
 #   Column       Non-Null Count  Dtype  
---  ------       --------------  -----  
 0   SUBDIVISION  91 non-null     object 
 1   YEAR         91 non-null     int64  
 2   JAN          90 non-null     float64
 3   FEB          90 non-null     float64
 4   MAR          89 non-null     float64
 5   APR          91 non-null     float64
 6   MAY          91 non-null     float64
 7   JUN          90 non-null     float64
 8   JUL          90 non-null     float64
 9   AUG          91 non-null     float64
 10  SEP          91 non-null     float64
 11  OCT          89 non-null     float64
 12  NOV          89 non-null     float64
 13  DEC          89 non-null     float64
 14  ANNUAL       85 non-null     float64
 15  Jan-Feb      90 non-null     float64
 16  Mar-May      89 non-null     float64
 17  Jun-Sep      89 non-null     float64
 18  Oct-Dec      88 non-null     float64
dtypes: float64(17), int64(1), object(1)
memory usage: 13.6+ KB
```

In [13]:
```
data.isna().sum()
```

Out[13]:
```
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 [14]:
```
data2=data1.fillna(data.mean())
```

```
/tmp/ipykernel_14797/3105188393.py:1: FutureWarning: The default value of numeric_only in DataFrame.mean is
deprecated. In a future version, it will default to False. In addition, specifying 'numeric_only=None' is d
eprecated. Select only valid columns or specify the value of numeric_only to silence this warning.
  data2=data1.fillna(data.mean())
```

In [15]:
```
data2.isna().sum()
```

Out[15]:
```
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 [16]:
```
data2.head()
```

Out[16]:

	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
0	ARUNACHAL PRADESH	1916	48.1	69.8	71.100000	316.1	424.6	1124.9	711.963333	629.7	333.9	200.37191	36.257303	24.91573	3475.443529
1	ARUNACHAL PRADESH	1917	21.4	164.5	154.446067	269.6	107.9	823.8	909.100000	628.4	411.5	199.30000	63.500000	0.00000	3475.443529
2	ARUNACHAL PRADESH	1918	10.4	11.0	191.200000	144.6	861.1	1609.9	1303.000000	692.6	515.8	125.20000	7.800000	13.70000	5486.300000
3	ARUNACHAL PRADESH	1919	34.5	67.8	28.500000	256.9	420.6	973.6	999.000000	286.7	628.7	948.30000	40.700000	8.60000	4693.900000
4	ARUNACHAL PRADESH	1920	14.0	196.3	605.600000	364.7	173.6	840.6	535.400000	896.5	376.7	103.30000	0.000000	0.00000	4106.700000

In [17]:
```
data3=data1.fillna(data.mode())
```

In [18]:
```
data3
```

Out[18]:

	SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	Jan-Feb	Mar-May	Jun-Sep	Oc De
0	ARUNACHAL PRADESH	1916	48.1	69.8	71.1	316.1	424.6	1124.9	593.0	629.7	333.9	58.5	7.8	0.0	1668.5	117.9	811.8	1111.8	130.
1	ARUNACHAL PRADESH	1917	21.4	164.5	32.9	269.6	107.9	823.8	909.1	628.4	411.5	199.3	63.5	0.0	1749.9	185.9	379.7	2772.8	262.
2	ARUNACHAL PRADESH	1918	10.4	11.0	191.2	144.6	861.1	1609.9	1303.0	692.6	515.8	125.2	7.8	13.7	5486.3	21.4	1196.9	4121.3	146.
3	ARUNACHAL PRADESH	1919	34.5	67.8	28.5	256.9	420.6	973.6	999.0	286.7	628.7	948.3	40.7	8.6	4693.9	102.3	706.0	2888.0	997.
4	ARUNACHAL PRADESH	1920	14.0	196.3	605.6	364.7	173.6	840.6	535.4	896.5	376.7	103.3	0.0	0.0	4106.7	210.3	1143.9	2649.2	103.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.
86	ARUNACHAL PRADESH	2005	48.4	167.6	229.5	195.3	179.8	269.3	430.8	400.0	243.6	139.3	28.6	3.3	2335.5	216.0	604.6	1343.7	171.
87	ARUNACHAL PRADESH	2006	6.0	103.7	63.3	202.7	321.7	520.4	382.2	227.6	263.2	77.2	69.7	21.7	2259.6	109.7	587.7	1393.5	168.
88	ARUNACHAL PRADESH	2007	13.4	97.4	48.1	292.4	250.4	530.2	761.0	364.6	529.3	102.6	24.3	6.9	3020.7	110.8	590.9	2185.1	133.
89	ARUNACHAL PRADESH	2008	76.7	39.7	122.6	192.4	185.0	423.6	456.1	439.3	189.7	115.1	1.7	2.6	2244.4	116.4	499.9	1508.7	119.
90	ARUNACHAL PRADESH	2009	18.0	92.8	72.1	132.7	189.9	259.1	329.9	370.3	152.5	82.9	33.9	15.9	1749.9	110.8	394.7	1111.8	132.

91 rows × 19 columns

In [ ]:
```

```