In [156]:
```python
import pandas as pd
```

In [157]:
```python
data=pd.read_csv("/home/placement/Downloads/rainfall in india 1901-2015.csv")
```

In [158]:
```python
data.describe()
```

Out[158]:

	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
count	4116.000000	4112.000000	4113.000000	4110.000000	4112.000000	4113.000000	4111.000000	4109.000000	4112.000000	4110.000000	4109.0
mean	1958.218659	18.957320	21.805325	27.359197	43.127432	85.745417	230.234444	347.214334	290.263497	197.361922	95.5
std	33.140898	33.585371	35.909488	46.959424	67.831168	123.234904	234.710758	269.539667	188.770477	135.408345	99.5
min	1901.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.400000	0.000000	0.000000	0.100000	0.0
25%	1930.000000	0.600000	0.600000	1.000000	3.000000	8.600000	70.350000	175.600000	155.975000	100.525000	14.0
50%	1958.000000	6.000000	6.700000	7.800000	15.700000	36.600000	138.700000	284.800000	259.400000	173.900000	65.2
75%	1987.000000	22.200000	26.800000	31.300000	49.950000	97.200000	305.150000	418.400000	377.800000	265.800000	148.4
max	2015.000000	583.700000	403.500000	605.600000	595.100000	1168.600000	1609.900000	2362.800000	1664.600000	1222.000000	948.3

```
In [159]: list(data)
```

```
Out[159]: ['SUBDIVISION',
           'YEAR',
           'JAN',
           'FEB',
           'MAR',
           'APR',
           'MAY',
           'JUN',
           'JUL',
           'AUG',
           'SEP',
           'OCT',
           'NOV',
           'DEC',
           'ANNUAL',
           'Jan-Feb',
           'Mar-May',
           'Jun-Sep',
           'Oct-Dec']
```

In [160]: `data.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 4116 entries, 0 to 4115
Data columns (total 19 columns):
 #   Column       Non-Null Count  Dtype
---  ------       --------------  -----
 0   SUBDIVISION  4116 non-null   object
 1   YEAR         4116 non-null   int64
 2   JAN          4112 non-null   float64
 3   FEB          4113 non-null   float64
 4   MAR          4110 non-null   float64
 5   APR          4112 non-null   float64
 6   MAY          4113 non-null   float64
 7   JUN          4111 non-null   float64
 8   JUL          4109 non-null   float64
 9   AUG          4112 non-null   float64
 10  SEP          4110 non-null   float64
 11  OCT          4109 non-null   float64
 12  NOV          4105 non-null   float64
 13  DEC          4106 non-null   float64
 14  ANNUAL       4090 non-null   float64
 15  Jan-Feb      4110 non-null   float64
 16  Mar-May      4107 non-null   float64
 17  Jun-Sep      4106 non-null   float64
 18  Oct-Dec      4103 non-null   float64
dtypes: float64(17), int64(1), object(1)
memory usage: 611.1+ KB
```

In [161]:
```python
data.isna().sum()
```

Out[161]:
```
SUBDIVISION     0
YEAR            0
JAN             4
FEB             3
MAR             6
APR             4
MAY             3
JUN             5
JUL             7
AUG             4
SEP             6
OCT             7
NOV            11
DEC            10
ANNUAL         26
Jan-Feb         6
Mar-May         9
Jun-Sep        10
Oct-Dec        13
dtype: int64
```

```
In [162]: data=data.groupby(['SUBDIVISION']).count()
          data
```

Out[162]:

SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	Jan-Feb	Mar-May	Jun-Sep	Oct-Dec
ANDAMAN & NICOBAR ISLANDS	110	110	110	108	108	109	108	108	108	107	108	108	107	104	110	107	107	107
ARUNACHAL PRADESH	97	96	96	95	97	97	96	96	97	97	95	95	95	91	96	95	95	94
ASSAM & MEGHALAYA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
BIHAR	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
CHHATTISGARH	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
COASTAL ANDHRA PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
COASTAL KARNATAKA	115	114	115	115	115	115	115	115	115	115	115	115	115	114	114	115	115	115
EAST MADHYA PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
EAST RAJASTHAN	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
EAST UTTAR PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
GANGETIC WEST BENGAL	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
GUJARAT REGION	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
HARYANA DELHI & CHANDIGARH	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
HIMACHAL PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
JAMMU & KASHMIR	115	115	115	115	115	115	115	114	115	115	115	114	114	114	115	115	114	114
JHARKHAND	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
KERALA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
KONKAN & GOA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
LAKSHADWEEP	114	112	113	112	112	112	112	111	112	111	111	108	110	103	111	110	110	108
MADHYA MAHARASHTRA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
MATATHWADA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115

	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	Jan-Feb	Mar-May	Jun-Sep	Oct-Dec
SUBDIVISION																		
NAGA MANI MIZO TRIPURA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
NORTH INTERIOR KARNATAKA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
ORISSA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
PUNJAB	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
RAYALSEEMA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
SAURASHTRA & KUTCH	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
SOUTH INTERIOR KARNATAKA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
SUB HIMALAYAN WEST BENGAL & SIKKIM	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
TAMIL NADU	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
TELANGANA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
UTTARAKHAND	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
VIDARBHA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
WEST MADHYA PRADESH	115	115	114	115	115	115	115	115	115	115	115	115	115	114	114	115	115	115
WEST RAJASTHAN	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
WEST UTTAR PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115

In [163]:
```python
data1=data.loc[(data.YEAR<=2010)]
```

In [164]: `data1.tail(5)`

Out[164]:

SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	Jan-Feb	Mar-May	Jun-Sep	Oct-Dec
UTTARAKHAND	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
VIDARBHA	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
WEST MADHYA PRADESH	115	115	114	115	115	115	115	115	115	115	115	115	115	114	114	115	115	115
WEST RAJASTHAN	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
WEST UTTAR PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115

In [165]: `data2=data.drop(['ANNUAL','Jan-Feb','Mar-May','Jun-Sep','Oct-Dec'],axis=1)`

In [166]: data2

Out[166]:

SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ANDAMAN & NICOBAR ISLANDS	110	110	110	108	108	109	108	108	108	107	108	108	107
ARUNACHAL PRADESH	97	96	96	95	97	97	96	96	97	97	95	95	95
ASSAM & MEGHALAYA	115	115	115	115	115	115	115	115	115	115	115	115	115
BIHAR	115	115	115	115	115	115	115	115	115	115	115	115	115
CHHATTISGARH	115	115	115	115	115	115	115	115	115	115	115	115	115
COASTAL ANDHRA PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115
COASTAL KARNATAKA	115	114	115	115	115	115	115	115	115	115	115	115	115
EAST MADHYA PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115
EAST RAJASTHAN	115	115	115	115	115	115	115	115	115	115	115	115	115
EAST UTTAR PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115
GANGETIC WEST BENGAL	115	115	115	115	115	115	115	115	115	115	115	115	115
GUJARAT REGION	115	115	115	115	115	115	115	115	115	115	115	115	115
HARYANA DELHI & CHANDIGARH	115	115	115	115	115	115	115	115	115	115	115	115	115
HIMACHAL PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115
JAMMU & KASHMIR	115	115	115	115	115	115	115	114	115	115	115	114	114
JHARKHAND	115	115	115	115	115	115	115	115	115	115	115	115	115
KERALA	115	115	115	115	115	115	115	115	115	115	115	115	115
KONKAN & GOA	115	115	115	115	115	115	115	115	115	115	115	115	115
LAKSHADWEEP	114	112	113	112	112	112	112	111	112	111	111	108	110
MADHYA MAHARASHTRA	115	115	115	115	115	115	115	115	115	115	115	115	115
MATATHWADA	115	115	115	115	115	115	115	115	115	115	115	115	115
NAGA MANI MIZO TRIPURA	115	115	115	115	115	115	115	115	115	115	115	115	115
NORTH INTERIOR KARNATAKA	115	115	115	115	115	115	115	115	115	115	115	115	115

SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ORISSA	115	115	115	115	115	115	115	115	115	115	115	115	115
PUNJAB	115	115	115	115	115	115	115	115	115	115	115	115	115
RAYALSEEMA	115	115	115	115	115	115	115	115	115	115	115	115	115
SAURASHTRA & KUTCH	115	115	115	115	115	115	115	115	115	115	115	115	115
SOUTH INTERIOR KARNATAKA	115	115	115	115	115	115	115	115	115	115	115	115	115
SUB HIMALAYAN WEST BENGAL & SIKKIM	115	115	115	115	115	115	115	115	115	115	115	115	115
TAMIL NADU	115	115	115	115	115	115	115	115	115	115	115	115	115
TELANGANA	115	115	115	115	115	115	115	115	115	115	115	115	115
UTTARAKHAND	115	115	115	115	115	115	115	115	115	115	115	115	115
VIDARBHA	115	115	115	115	115	115	115	115	115	115	115	115	115
WEST MADHYA PRADESH	115	115	114	115	115	115	115	115	115	115	115	115	115
WEST RAJASTHAN	115	115	115	115	115	115	115	115	115	115	115	115	115
WEST UTTAR PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115

```
In [167]: data2['ANNUAL RAIN']=data2.apply(lambda row:row.JAN+row.FEB,axis=1)
```

In [168]: `data2`

Out[168]:

SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL RAIN
ANDAMAN & NICOBAR ISLANDS	110	110	110	108	108	109	108	108	108	107	108	108	107	220
ARUNACHAL PRADESH	97	96	96	95	97	97	96	96	97	97	95	95	95	192
ASSAM & MEGHALAYA	115	115	115	115	115	115	115	115	115	115	115	115	115	230
BIHAR	115	115	115	115	115	115	115	115	115	115	115	115	115	230
CHHATTISGARH	115	115	115	115	115	115	115	115	115	115	115	115	115	230
COASTAL ANDHRA PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	230
COASTAL KARNATAKA	115	114	115	115	115	115	115	115	115	115	115	115	115	229
EAST MADHYA PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	230
EAST RAJASTHAN	115	115	115	115	115	115	115	115	115	115	115	115	115	230
EAST UTTAR PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	230
GANGETIC WEST BENGAL	115	115	115	115	115	115	115	115	115	115	115	115	115	230
GUJARAT REGION	115	115	115	115	115	115	115	115	115	115	115	115	115	230
HARYANA DELHI & CHANDIGARH	115	115	115	115	115	115	115	115	115	115	115	115	115	230
HIMACHAL PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	230
JAMMU & KASHMIR	115	115	115	115	115	115	115	114	115	115	115	114	114	230
JHARKHAND	115	115	115	115	115	115	115	115	115	115	115	115	115	230
KERALA	115	115	115	115	115	115	115	115	115	115	115	115	115	230
KONKAN & GOA	115	115	115	115	115	115	115	115	115	115	115	115	115	230
LAKSHADWEEP	114	112	113	112	112	112	112	111	112	111	111	108	110	225
MADHYA MAHARASHTRA	115	115	115	115	115	115	115	115	115	115	115	115	115	230
MATATHWADA	115	115	115	115	115	115	115	115	115	115	115	115	115	230
NAGA MANI MIZO TRIPURA	115	115	115	115	115	115	115	115	115	115	115	115	115	230
NORTH INTERIOR KARNATAKA	115	115	115	115	115	115	115	115	115	115	115	115	115	230

SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL RAIN
ORISSA	115	115	115	115	115	115	115	115	115	115	115	115	115	230
PUNJAB	115	115	115	115	115	115	115	115	115	115	115	115	115	230
RAYALSEEMA	115	115	115	115	115	115	115	115	115	115	115	115	115	230
SAURASHTRA & KUTCH	115	115	115	115	115	115	115	115	115	115	115	115	115	230
SOUTH INTERIOR KARNATAKA	115	115	115	115	115	115	115	115	115	115	115	115	115	230
SUB HIMALAYAN WEST BENGAL & SIKKIM	115	115	115	115	115	115	115	115	115	115	115	115	115	230
TAMIL NADU	115	115	115	115	115	115	115	115	115	115	115	115	115	230
TELANGANA	115	115	115	115	115	115	115	115	115	115	115	115	115	230
UTTARAKHAND	115	115	115	115	115	115	115	115	115	115	115	115	115	230
VIDARBHA	115	115	115	115	115	115	115	115	115	115	115	115	115	230
WEST MADHYA PRADESH	115	115	114	115	115	115	115	115	115	115	115	115	115	229
WEST RAJASTHAN	115	115	115	115	115	115	115	115	115	115	115	115	115	230
WEST UTTAR PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	230

```
In [169]: data2['ANNUAL RAIN']=data2.apply(lambda row:row.JAN+row.FEB+row.MAR+row.APR+row.MAY+row.JUN+row.JUL+row.AUG+
```

In [170]: data2

Out[170]:

SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL RAIN
ANDAMAN & NICOBAR ISLANDS	110	110	110	108	108	109	108	108	108	107	108	108	107	1299
ARUNACHAL PRADESH	97	96	96	95	97	97	96	96	97	97	95	95	95	1152
ASSAM & MEGHALAYA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
BIHAR	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
CHHATTISGARH	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
COASTAL ANDHRA PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
COASTAL KARNATAKA	115	114	115	115	115	115	115	115	115	115	115	115	115	1379
EAST MADHYA PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
EAST RAJASTHAN	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
EAST UTTAR PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
GANGETIC WEST BENGAL	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
GUJARAT REGION	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
HARYANA DELHI & CHANDIGARH	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
HIMACHAL PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
JAMMU & KASHMIR	115	115	115	115	115	115	115	114	115	115	115	114	114	1377
JHARKHAND	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
KERALA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
KONKAN & GOA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
LAKSHADWEEP	114	112	113	112	112	112	112	111	112	111	111	108	110	1336
MADHYA MAHARASHTRA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
MATATHWADA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
NAGA MANI MIZO TRIPURA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
NORTH INTERIOR KARNATAKA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380

SUBDIVISION	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL RAIN
ORISSA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
PUNJAB	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
RAYALSEEMA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
SAURASHTRA & KUTCH	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
SOUTH INTERIOR KARNATAKA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
SUB HIMALAYAN WEST BENGAL & SIKKIM	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
TAMIL NADU	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
TELANGANA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
UTTARAKHAND	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
VIDARBHA	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
WEST MADHYA PRADESH	115	115	114	115	115	115	115	115	115	115	115	115	115	1379
WEST RAJASTHAN	115	115	115	115	115	115	115	115	115	115	115	115	115	1380
WEST UTTAR PRADESH	115	115	115	115	115	115	115	115	115	115	115	115	115	1380

In [171]:
```python
cor=data.corr()
```

In [172]: cor

Out[172]:

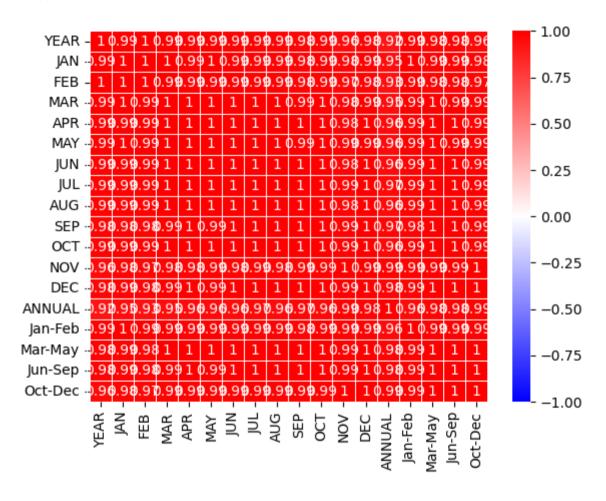|	YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
YEAR	1.000000	0.993760	0.997455	0.993973	0.989823	0.993275	0.992164	0.985452	0.989823	0.978107	0.988810	0.960883	0.977662	0.91
JAN	0.993760	1.000000	0.996021	0.995347	0.992011	0.996508	0.993926	0.991848	0.992011	0.984236	0.994791	0.979961	0.986975	0.94
FEB	0.997455	0.996021	1.000000	0.994589	0.990564	0.994906	0.992840	0.988334	0.990564	0.980386	0.991652	0.970022	0.981743	0.93
MAR	0.993973	0.995347	0.994589	1.000000	0.999312	0.999747	0.999844	0.997201	0.999312	0.994813	0.998903	0.982465	0.994152	0.95
APR	0.989823	0.992011	0.990564	0.999312	1.000000	0.998759	0.999812	0.997771	1.000000	0.997767	0.998838	0.984162	0.996123	0.95
MAY	0.993275	0.996508	0.994906	0.999747	0.998759	1.000000	0.999447	0.997619	0.998759	0.994332	0.999432	0.985250	0.994718	0.95
JUN	0.992164	0.993926	0.992840	0.999844	0.999812	0.999447	1.000000	0.997644	0.999812	0.996393	0.999043	0.983443	0.995263	0.95
JUL	0.985452	0.991848	0.988334	0.997201	0.997771	0.997619	0.997644	1.000000	0.997771	0.996559	0.998641	0.991730	0.999047	0.96
AUG	0.989823	0.992011	0.990564	0.999312	1.000000	0.998759	0.999812	0.997771	1.000000	0.997767	0.998838	0.984162	0.996123	0.95
SEP	0.978107	0.984236	0.980386	0.994813	0.997767	0.994332	0.996393	0.996559	0.997767	1.000000	0.996543	0.988190	0.997805	0.97
OCT	0.988810	0.994791	0.991652	0.998903	0.998838	0.999432	0.999043	0.998641	0.998838	0.996543	1.000000	0.989853	0.997170	0.96
NOV	0.960883	0.979961	0.970022	0.982465	0.984162	0.985250	0.983443	0.991730	0.984162	0.988190	0.989853	1.000000	0.994641	0.98
DEC	0.977662	0.986975	0.981743	0.994152	0.996123	0.994718	0.995263	0.999047	0.996123	0.997805	0.997170	0.994641	1.000000	0.97
ANNUAL	0.915536	0.945631	0.930247	0.952015	0.958152	0.955291	0.955106	0.967881	0.958152	0.971438	0.964448	0.988780	0.976902	1.00
Jan-Feb	0.986539	0.997512	0.993725	0.992345	0.989647	0.994332	0.991228	0.991424	0.989647	0.984169	0.994090	0.985808	0.988203	0.95
Mar-May	0.978447	0.987926	0.982640	0.995088	0.997101	0.995659	0.996219	0.997785	0.997101	0.998866	0.998154	0.993647	0.998940	0.97
Jun-Sep	0.977662	0.986975	0.981743	0.994152	0.996123	0.994718	0.995263	0.999047	0.996123	0.997805	0.997170	0.994641	1.000000	0.97
Oct-Dec	0.963418	0.980399	0.971337	0.985289	0.987682	0.987376	0.986600	0.993899	0.987682	0.992147	0.991854	0.999479	0.996960	0.98

In [173]: **import** seaborn **as** sns

In [174]: `sns.heatmap(cor,vmax=1,vmin=-1,annot=True,linewidth=.5,cmap='bwr')`

Out[174]: `<Axes: >`

In [ ]: