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Rolling mean

In [3]:

```
import pandas as pd
from matplotlib import pyplot
from matplotlib import pyplot as plt
from statsmodels.tsa.api import ExponentialSmoothing, SimpleExpSmoothing, Holt
from pylab import rcParams
rcParams['figure.figsize']=20,5
```

In [5]:

```
series=pd.read_csv('C:/Users/Prathyu Lachireddy/Desktop/BP/Electric_Production.csv',header=
series
```

Out[5]:

	Units
DATE	
01-01-1985	72.5052
02-01-1985	70.6720
03-01-1985	62.4502
04-01-1985	57.4714
05-01-1985	55.3151
...	...
09-01-2017	98.6154
10-01-2017	93.6137
11-01-2017	97.3359
12-01-2017	114.7212
01-01-2018	129.4048

397 rows × 1 columns

In [6]:

```
#rolling average transform
rollingseries=series[1:50].rolling(window=5)

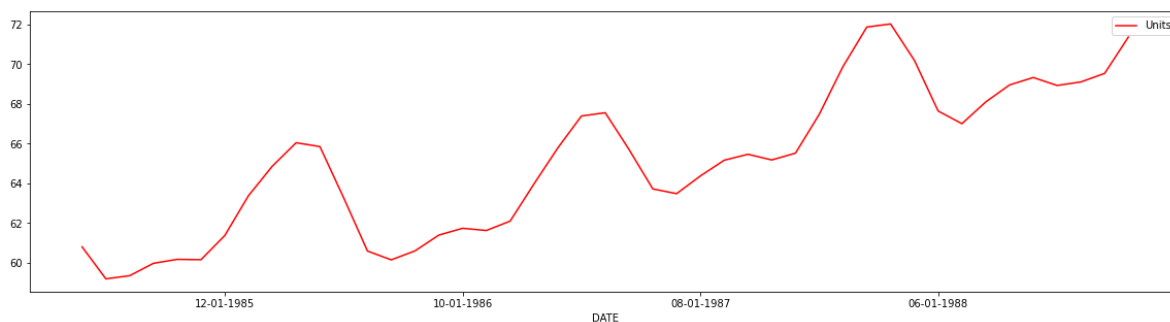
rollingmean=rollingseries.mean()

print(rollingmean.head(10))
```

DATE	Units
02-01-1985	NaN
03-01-1985	NaN
04-01-1985	NaN
05-01-1985	NaN
06-01-1985	60.79982
07-01-1985	59.18946
08-01-1985	59.34912
09-01-1985	59.97176
10-01-1985	60.17182
11-01-1985	60.15384

In [7]:

```
rollingmean.plot(color='red')
pyplot.show()
```



In [9]:

```
# Rolling Avg Transform
rollingseries=series[1:50].rolling(window=10)

rollingmean=rollingseries.mean()
print(rollingmean.head(10))
```

DATE	Units
02-01-1985	NaN
03-01-1985	NaN
04-01-1985	NaN
05-01-1985	NaN
06-01-1985	NaN
07-01-1985	NaN
08-01-1985	NaN
09-01-1985	NaN
10-01-1985	NaN
11-01-1985	60.47683

In []: