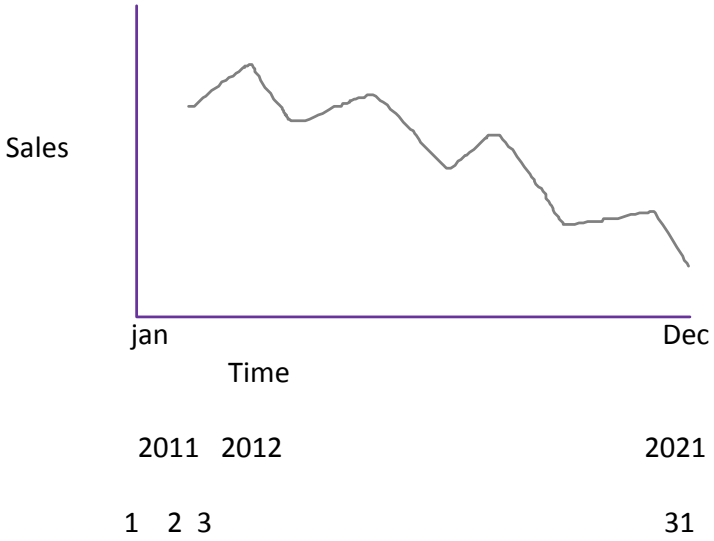
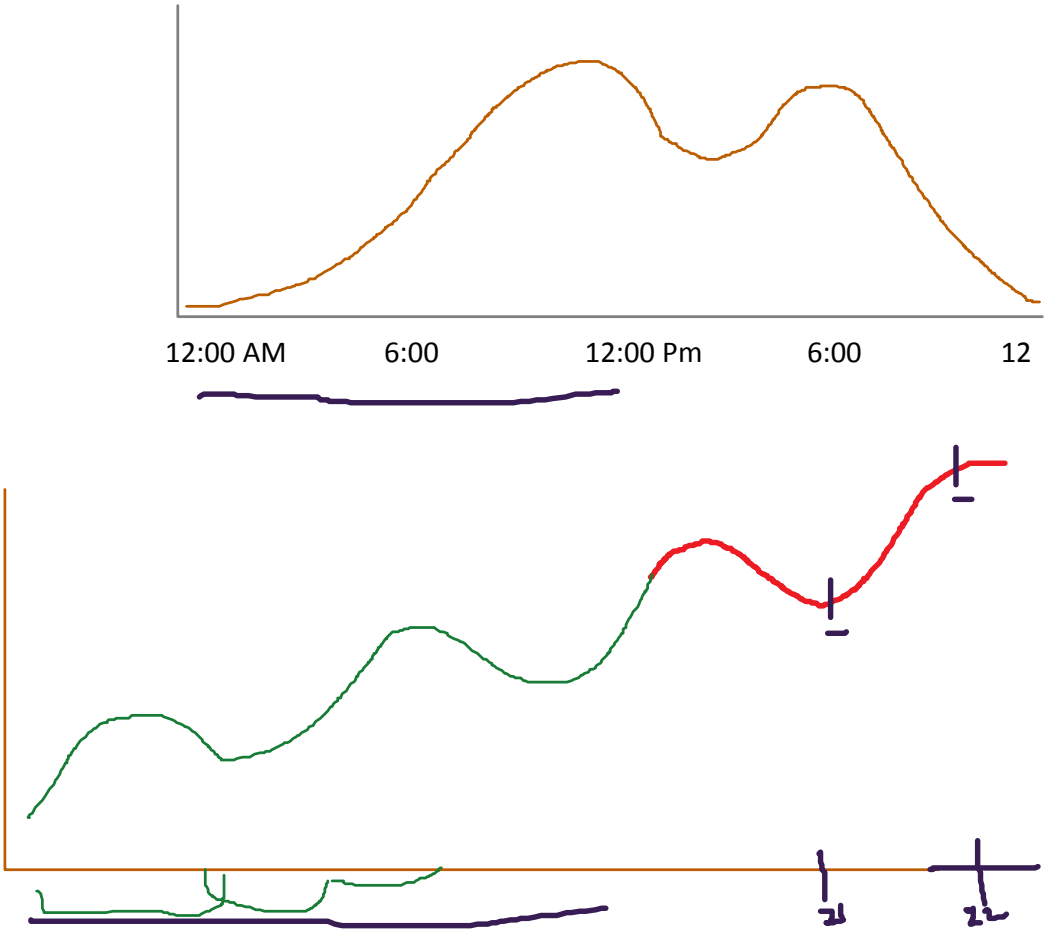
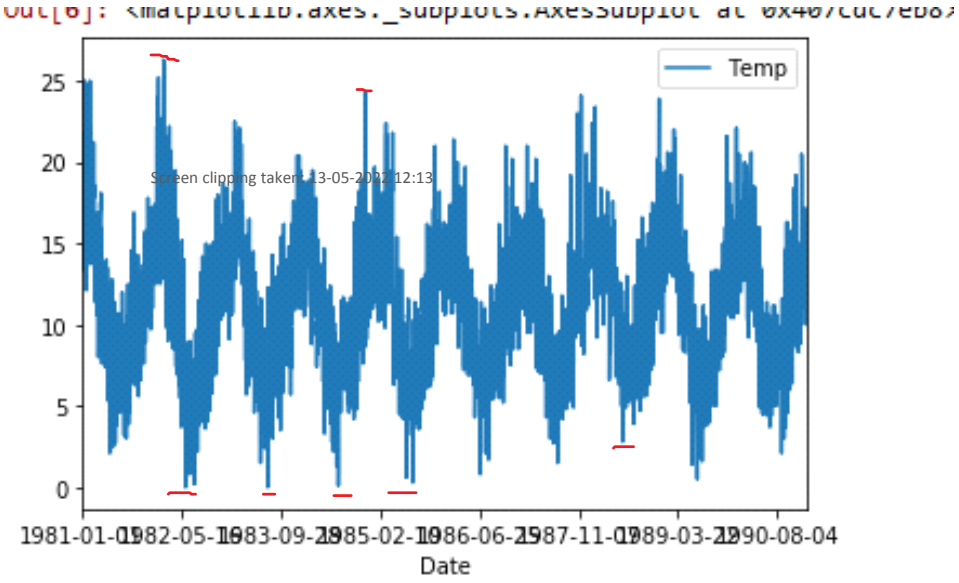
Time series

13 May 2022 11:27

Time series data and cross sectional data







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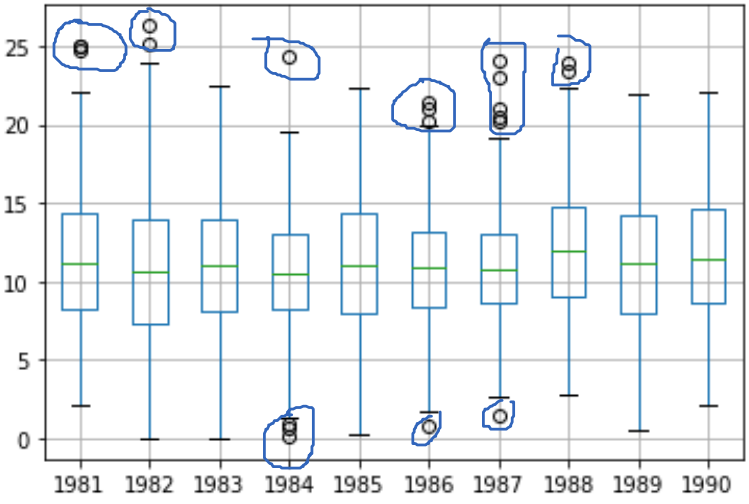
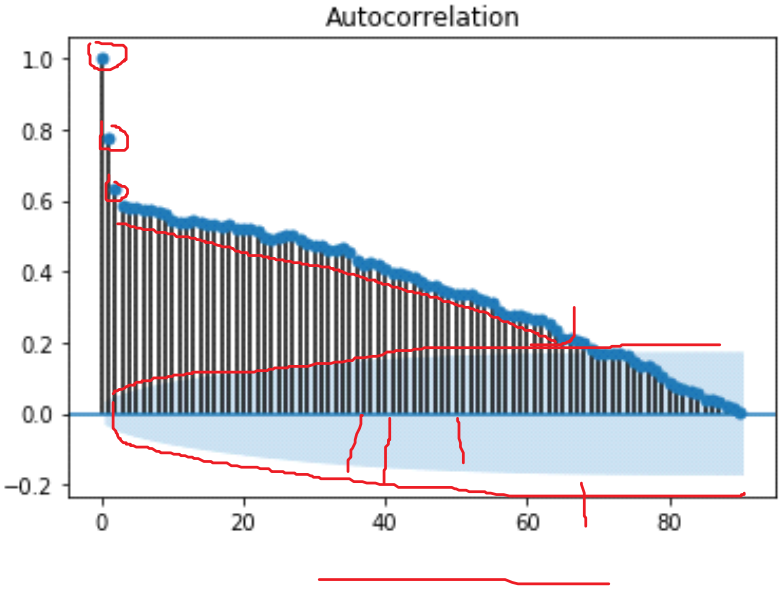


Y = Mx + C

Yt = M.Yt-1 + C
Yt+1 = M.Yt + C

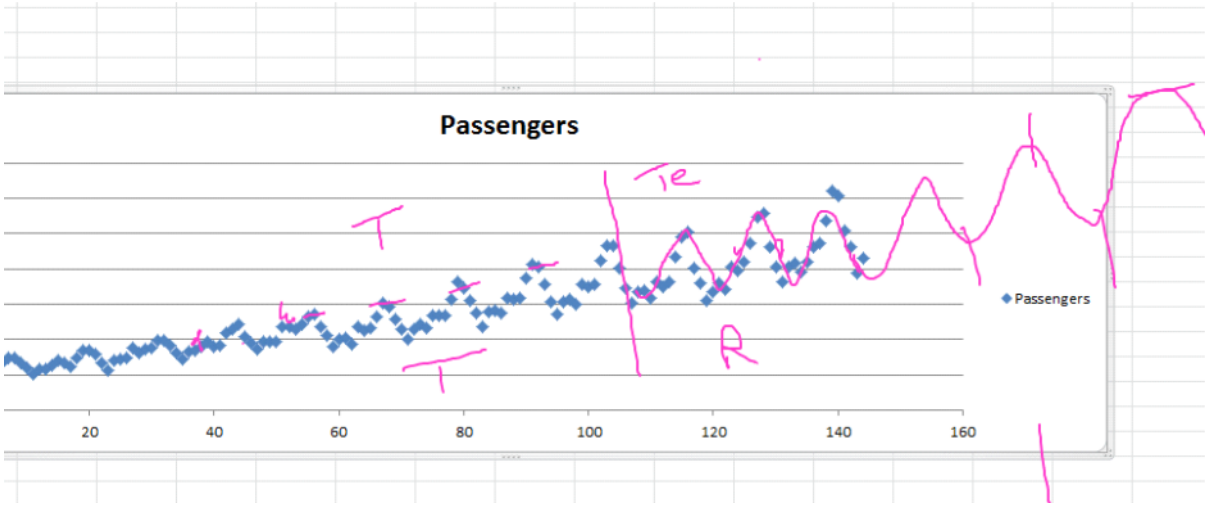
Yt = M.Yt-2 + C
Yt = M1.Yt-2+ M2.Yt-1 + C

If we check the relationship between the rows/samples then we will called it is "**Auto correlation**"

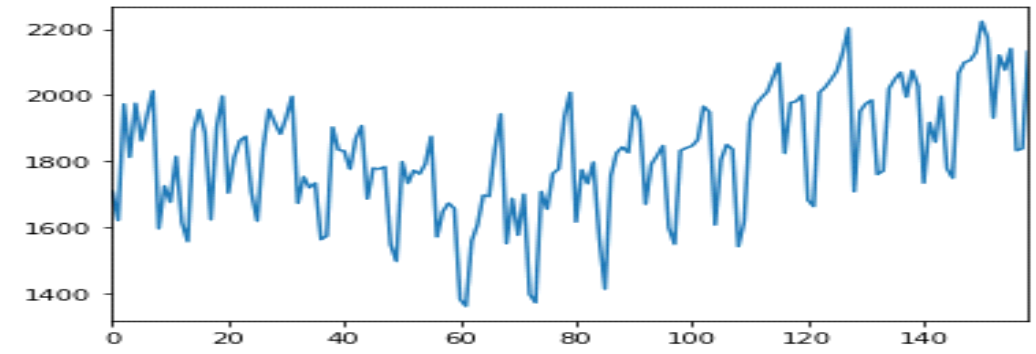


Resampling involves changing the frequency of your time series observations. Two types of resampling are:

- Up sampling : Where you increase the frequency of the samples, such as from minutes to seconds.
- Down sampling : Where you decrease the frequency of the samples, such as from days to months.



```
In [10]: Walmart.Footfalls.plot()
Out[10]: <matplotlib.axes._subplots.AxesSubplot at 0xf5b1e54eb8>
```



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```
Out[19]: <matplotlib.axes._subplots.AxesSubplot at 0xf5b3dcc3c8>
```