
genius
creativity
PLAN
WORK
TEAM
WORK
PLAN
BUSINESS
Idea
Time
concept
Team
Power
success
PLAN
IDEA
TEAM
WORK
IDEA
PLAN

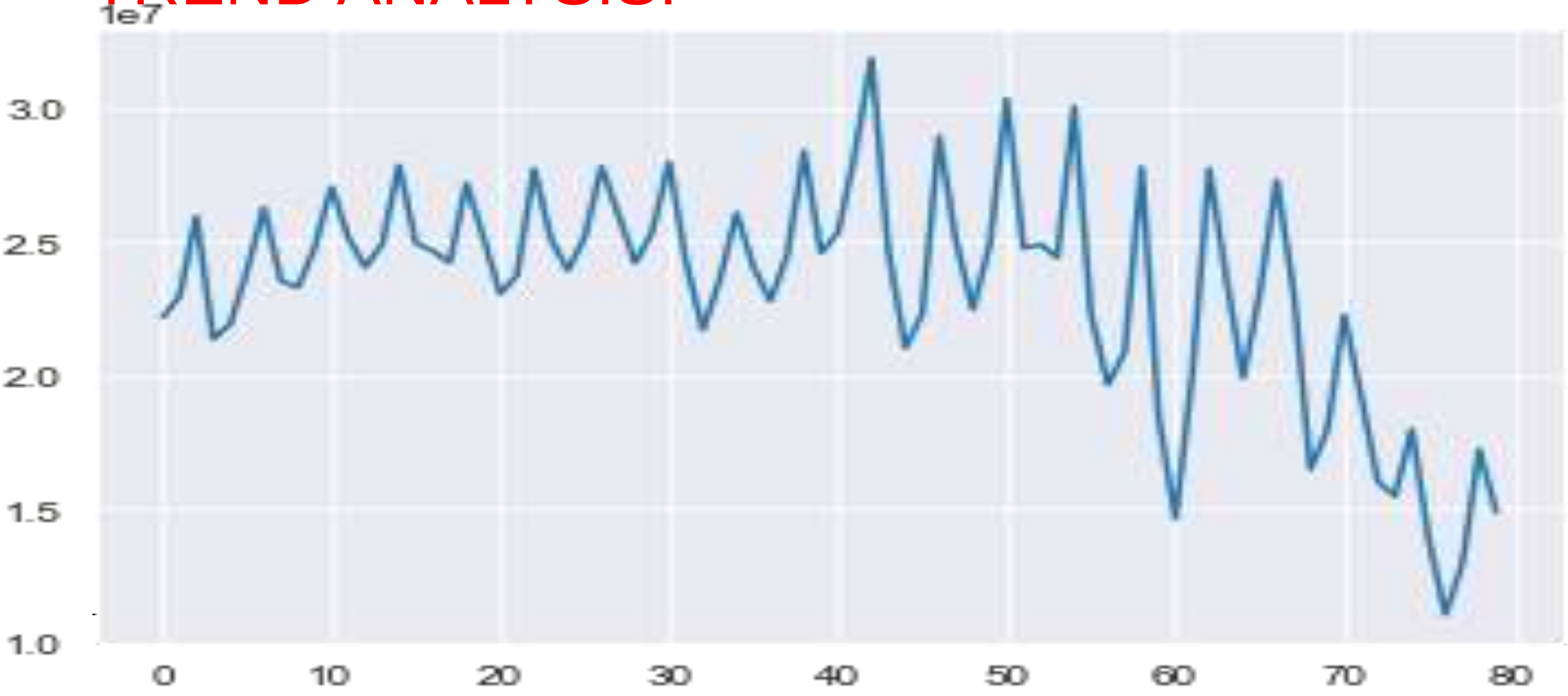
COAL POWER

INTRODUCTION:-

- Renewable energy is energy that collected from renewable resources that are naturally replenished on a human timescale.

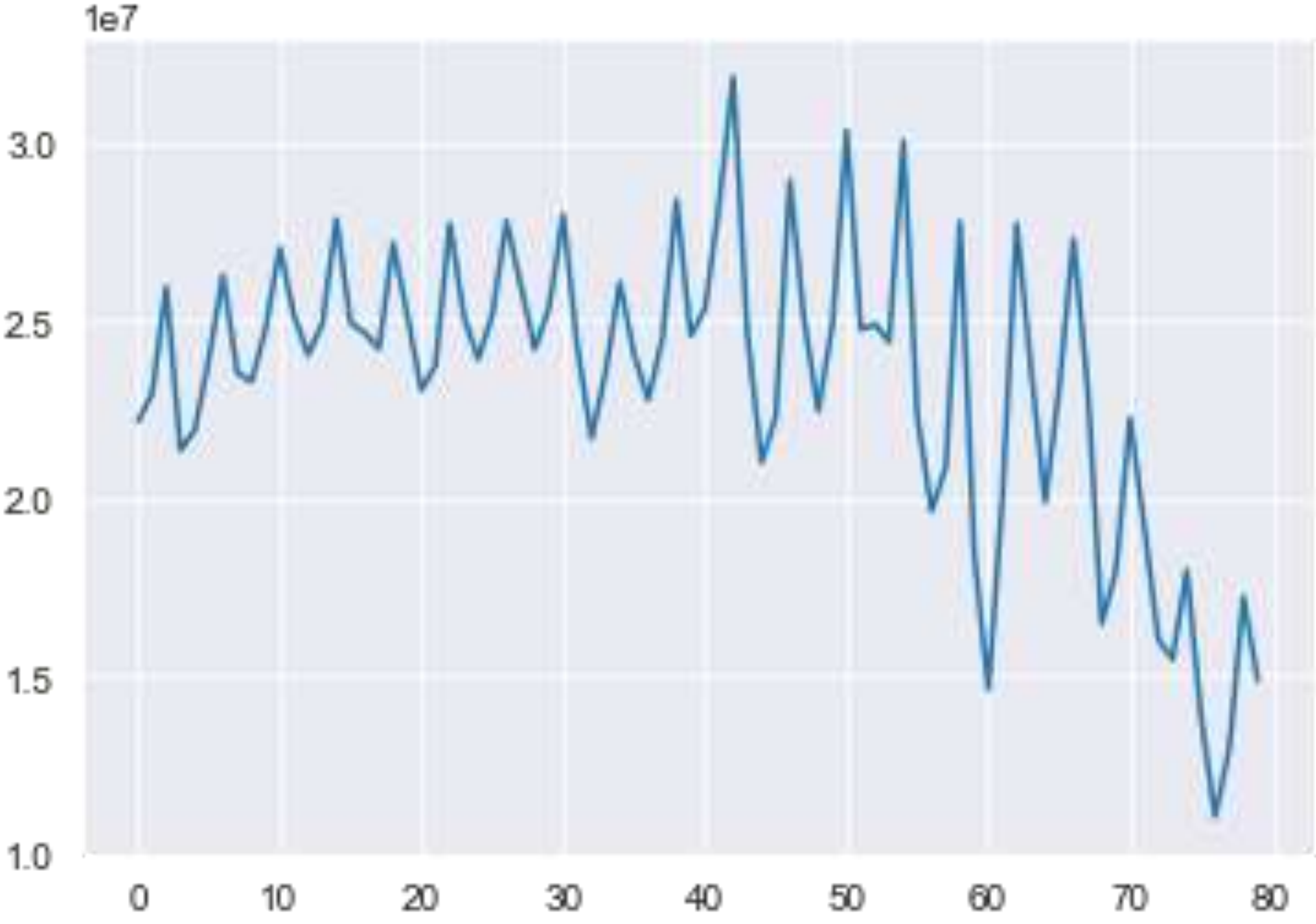
- The advantages of renewable energy is environmentally friendly, cost-effective, diversification of energy sources, energy security etc.
- Let’s goes into details of the project for renewable energy production.

TREND ANALYSIS:-

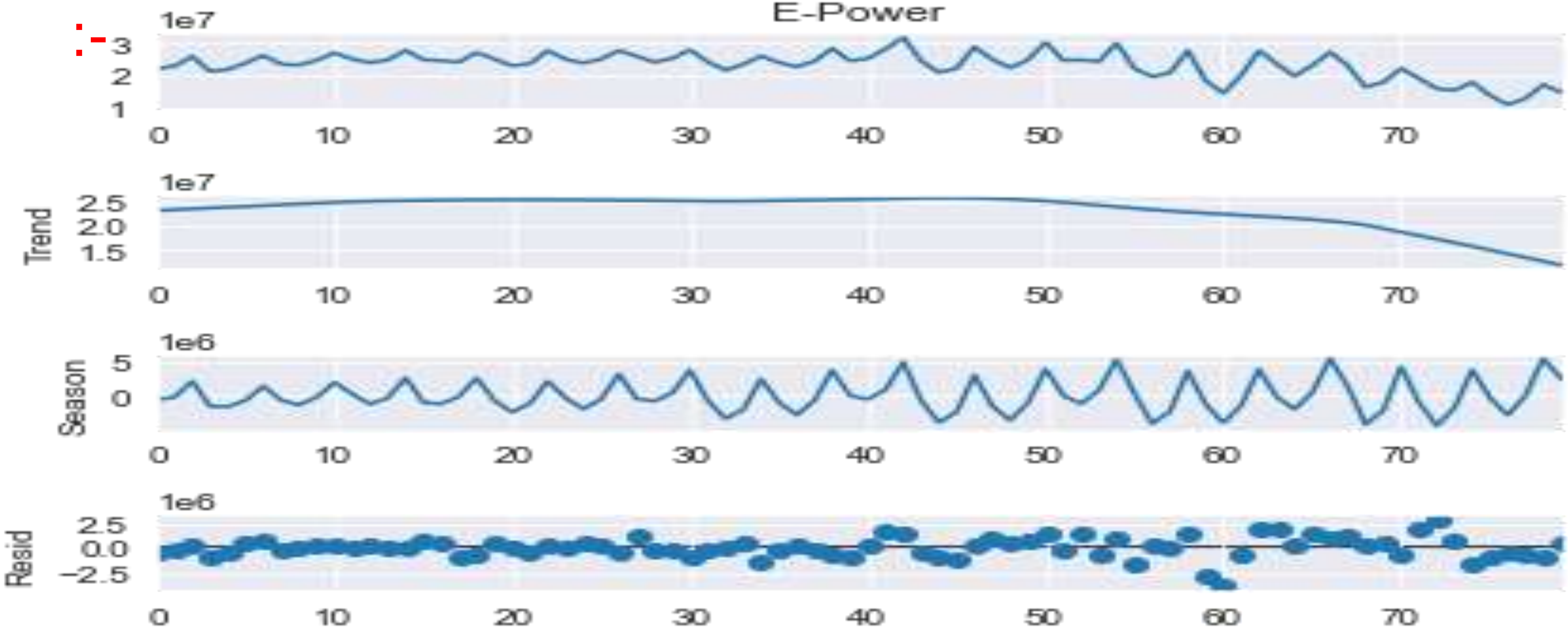


DETREND ANALYSIS:-

- Detrending refers to change the trend from a time series.
- We need to detrend because data creates some kinds of distortions.

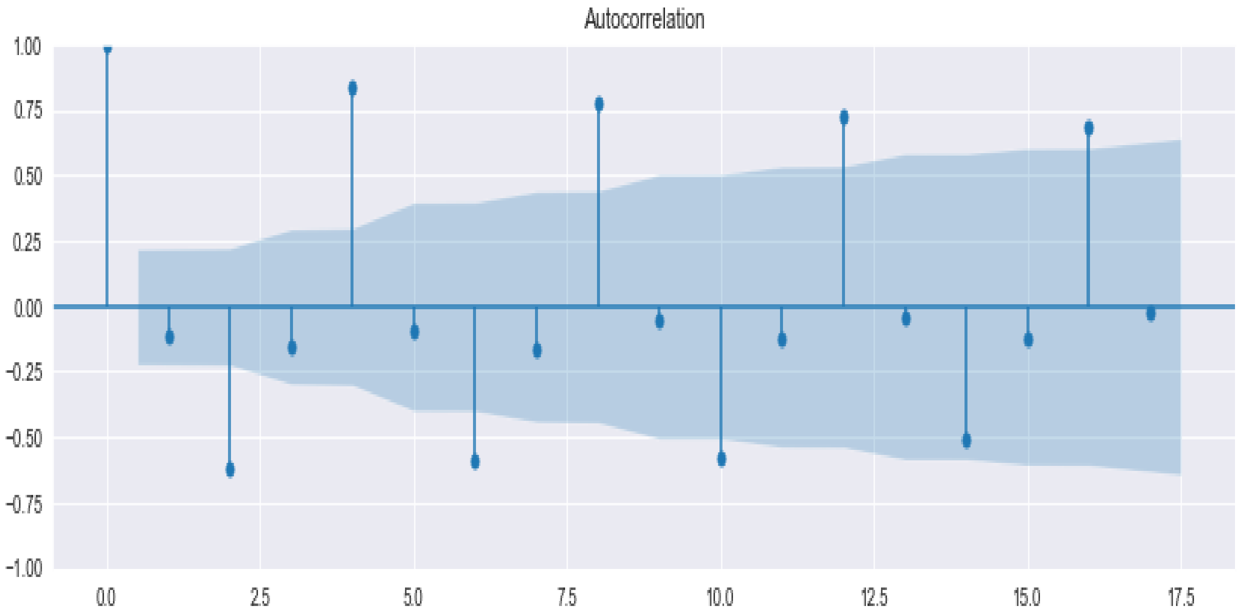


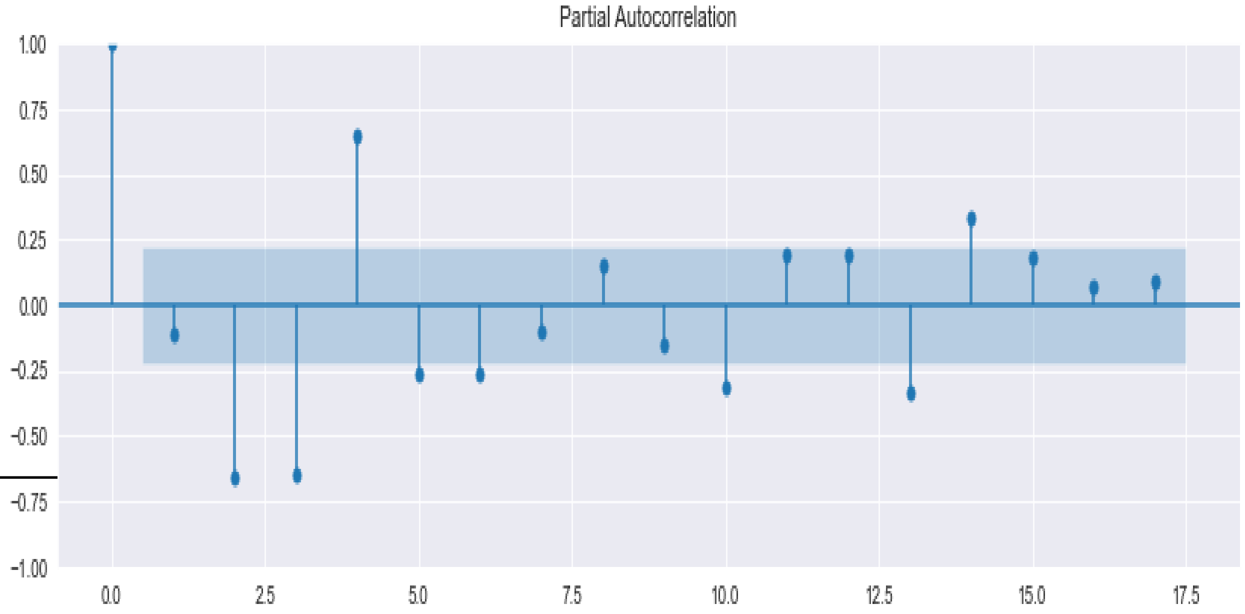
EXTRACTION


E-Power
1e7
3
2
1
0
10
20
30
40
50
60
70
Trend
1e7
2.5
2.0
1.5
Season
1e6
5
0
Resid
1e6
2.5
0.0
−2.5

AUTO CORRELATION & PARTIAL AUTO CORRELATION:-

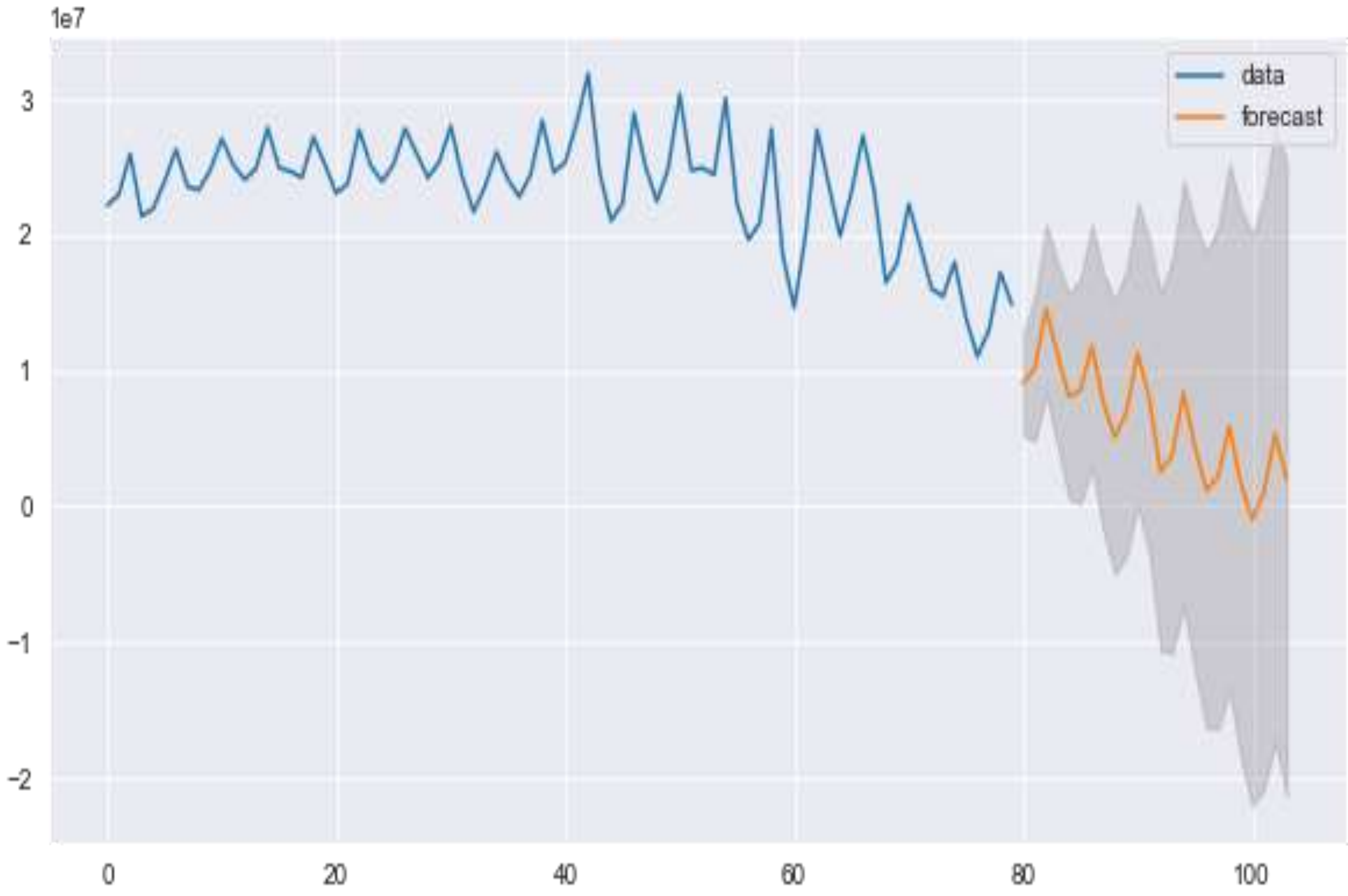
- Auto correlation is the intended to measure the relationship between a variables of a present values with any past values.
- Partial auto correlation is a summary of the relationship between an observation in a time series with observations at prior time steps with the relationships of intervening observations removed.





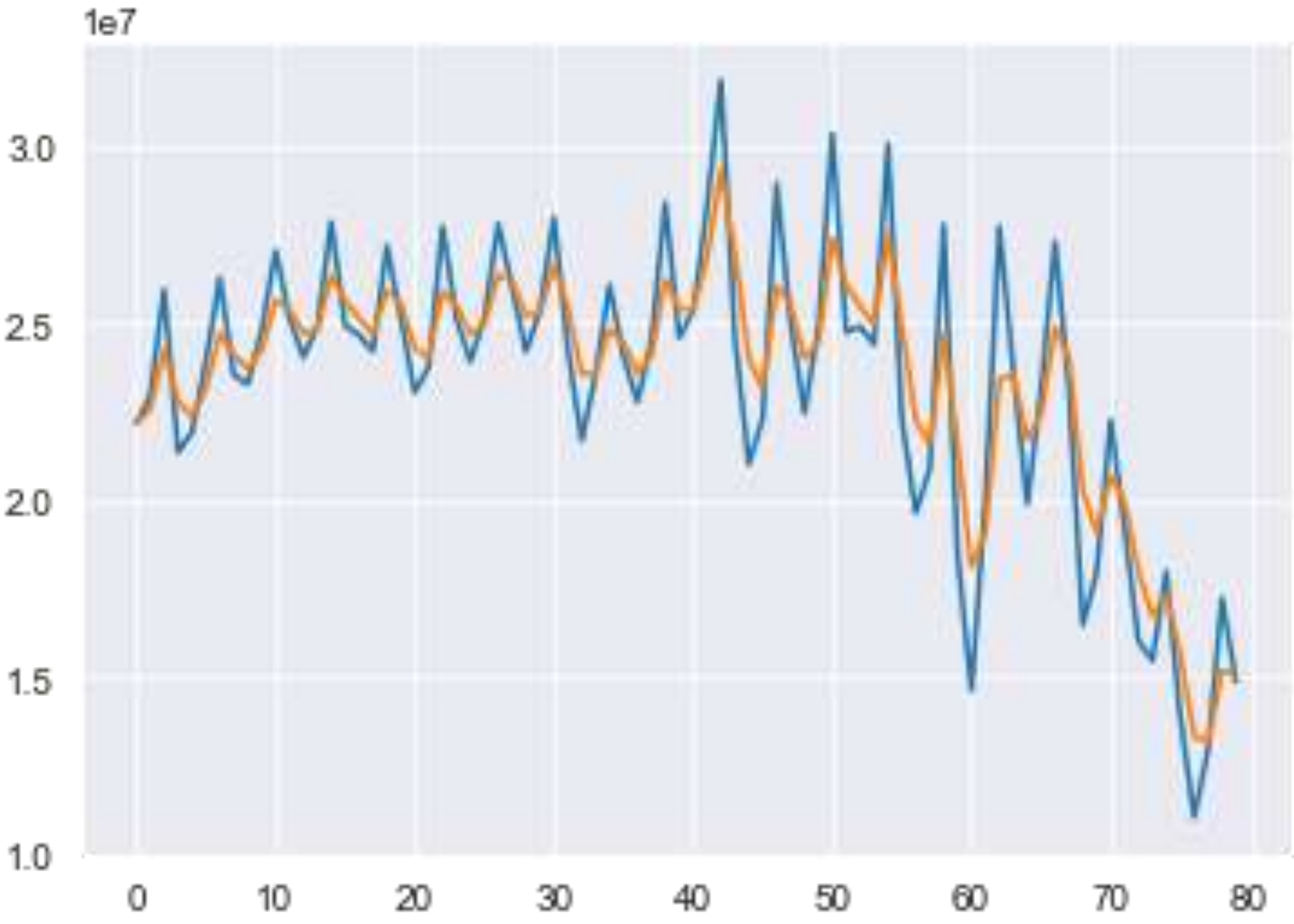
FORECASTING:-

- Forecasting is the process of making predictions based on present & past data.



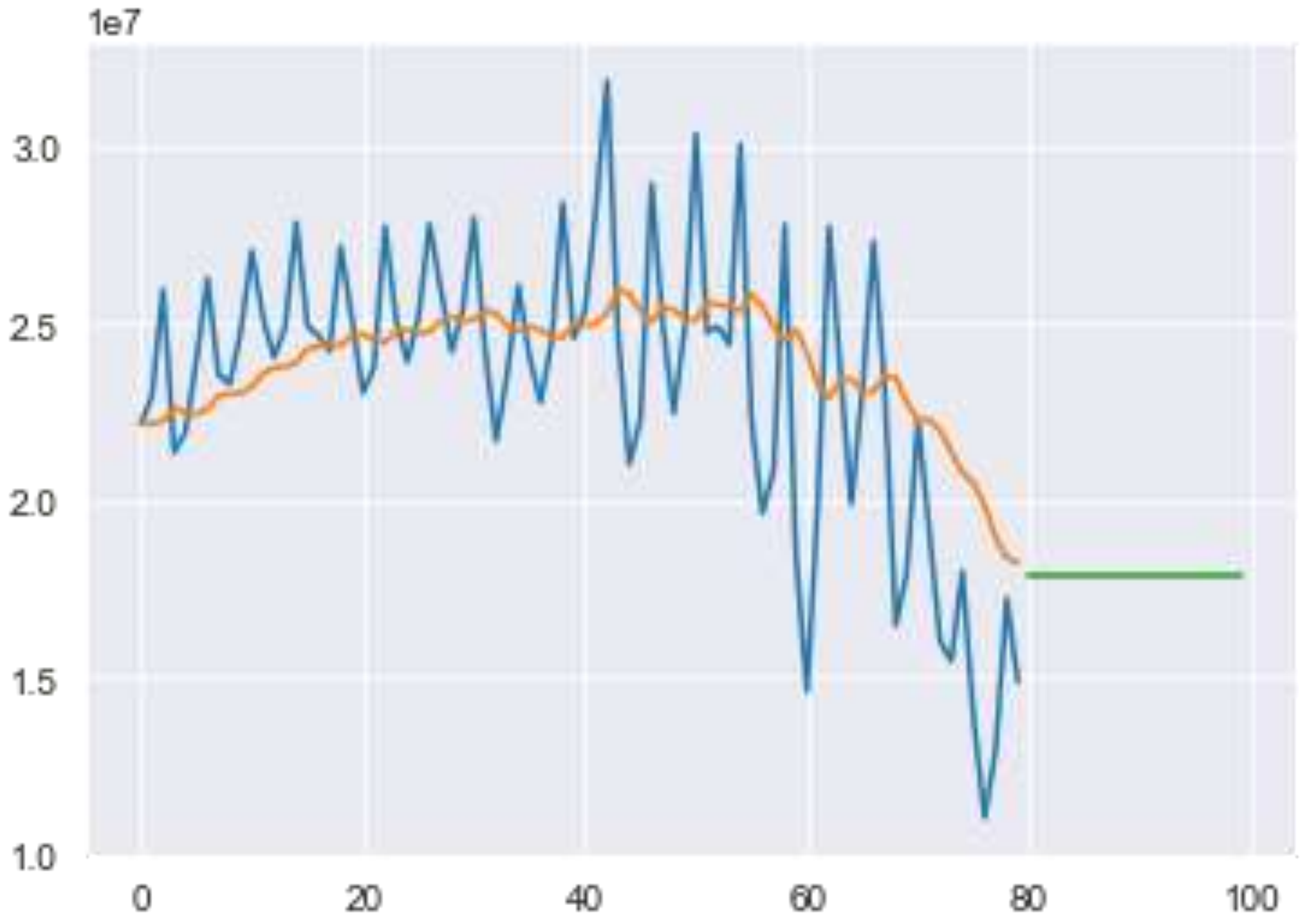
FORECASTING USING ARIMA:-

- Arima is a method for forecasting based on a historical time series.
- The forecast intervals for Arima models are based on assumptions that the residuals are uncorrelated & normally distributed.
- Based on the above experiment



HOLT-WINTERS MODEL:-

- Holt-Winters is model of time-series behavior.
- Holt-Winters models is a way to model three aspects of the time-series that is average, slope , seasonality.



SUMMARY:-

Holt Model Results			
Dep. Variable:	Co2 Emission	No. Observations:	38
Model:	Holt	SSE	5803.630
Optir			
Trenc			
Seasc			
Seasc			
Box-Cox:	False	Time:	12:12:23
Box-Cox Coeff.:	None		

	coeff	code	optimized
smoothing_level	1.0000000	alpha	True
smoothing_trend	0.000000	beta	True
initial_level	346.01032	l.0	True
initial_trend	1.0005012	b.0	True