**Project Details:**

Golden Task: Perform the time series analysis

Embark on a time series analysis project using a dataset with a time component, specifically historical stock prices. The objective is to uncover patterns, trends, and insights from the temporal data, enabling a better understanding of stock price movements over time.

## Details

**Context:**

Power System Operation Corporation Limited (POSOCO) is a wholly-owned Government of India enterprise under the Ministry of Power. It was earlier a wholly-owned subsidiary of Power Grid Corporation of India Limited. It was formed in March 2009 to handle the power management functions of PGCIL. The dataset has been scraped from the weekly energy reports of POSOCO.

In light of the recent COVID-19 situation, when everyone has been under lockdown for the months of April & May the impacts of the lockdown on economic activities have been faced by every sector in a positive or a negative way. With the electricity consumption being so crucial to the country, we came up with a plan to study the impact on energy consumption state and region wise. The dataset is exhaustive in its demonstration of energy consumption state wise.

**About Data set:**

Data is in the form of a time series for a period of 17 months beginning from 2nd Jan 2019 till 23rd May 2020. Rows are indexed with dates and columns represent states. Rows and columns put together, each data point reflects the power consumed in Mega Units (MU) by the given state (column) at the given date (row).

1. https://github.com/vishnuvardhankunsoth/Time_Series_Analysis/files/14285067/long_data_.csv
2. https://github.com/vishnuvardhankunsoth/Time_Series_Analysis/files/14285066/dataset_tk.csv

Insights:

1. During the months of April and May, electricity consumption reached its peak as a result of prolonged lockdown measures. With people confined to their homes for months on end, the demand for electricity surged significantly.

2. Comparatively, Saturdays and Sundays experience peak electricity usage, while weekdays typically see normal levels of consumption.
3. Success was achieved in forecasting time series analysis, despite encountering minor errors. Notably, patterns and trends were successfully identified within the data.