README / Guide for Netflix Revenue Data Set:

Netflix UCAN Revenue Analysis & Forecasting
This project uses linear regression to analyze and forecast Netflix's streaming revenue in the US and Canada over time.

Requirements:

- Python 3.8+
- Libraries: `pandas`, `matplotlib`, `seaborn`, `numpy`, `scikit-learn`

Project Steps:

1. **Load Data**:
   Ensure `netflix_revenue.csv` is in the same directory. The dataset should contain a `Date` column and a `UCAN Streaming Revenue` column.
2. **Data Preprocessing**:
   - Convert the `Date` column to a datetime format.
   - Create a numerical representation of the `Date` column (`Date_ordinal`).
3. **Visualization**:
   - Plot **UCAN Streaming Revenue** over time to observe trends.
4. **Linear Regression**:
   - Perform regression on the unscaled data to establish a baseline.
   - Use `StandardScaler` to scale the data for better model performance.
   - Refit the model with scaled data.
5. **Forecasting**:
   - Extend the dataset with future dates.
   - Use the trained model to predict future revenue.
6. **Plotting**:
   - Visualize the regression line for both original and scaled data.
   - Plot forecasts to assess future trends.