

# README

This Python script demonstrates the implementation of the SARIMA (Seasonal Autoregressive Integrated Moving Average) model for forecasting website traffic. It is designed to analyze time series data, specifically focusing on the number of website sessions, and predict future traffic trends.

## Features

- Implementation of SARIMA model for time series forecasting.
- Data visualization for comparing actual vs. predicted web traffic.
- Performance evaluation using metrics like Mean Squared Error (MSE) and Root Mean Squared Error (RMSE).
- Data loading and preprocessing for time series analysis.

## Requirements

- Python 3.x
- Pandas
- NumPy
- statsmodels
- matplotlib
- sklearn

To run the script, follow these steps:

- I have used jupyter notebook for implementation and exported the ipynb file to a .py extension file
- Place your web traffic data in CSV format in the same directory as the script or provide the path to your data file in the script.

Execute the script using Python:

1. Load the dataset by giving the correct path.
2. Run the script using python.