

## Time Series Homework 4: Time Series Cross Validation

Download the Walmart sales data from <https://www.kaggle.com/competitions/walmart-recruiting-store-sales-forecasting/data>

Pick 1 store or 1 department. If it has missing values and outliers, fill in missing values and impute outliers with the techniques in class 2. You can use the same store or department in homework 1.

Conduct cross validation and hyper parameter tuning to find the best hyperparameters for ARIMA, SARIMA, Exponential Smoothing, tree-based, LSTM, and Prophet models that you built in homework 2 and 3.

Bonus, after hyperparameter tuning, identify which model is the best model.

Submit homework to GitHub ([https://github.com/DS-XL/ds\\_intro\\_2024](https://github.com/DS-XL/ds_intro_2024)) by submitting a PR