Problem – Predict stock levels using hourly sales/sensor data
Goal – To more intelligently procure products from our suppliers

Steps:

1. Merge the sensor temp/sales datasets using index “timestamp”
   - ➢ Clean up dataset: remove any entries w/ timestamps not shared in all, remove any unnecessary variables such as useless id’s, drop na’s, reset index, etc.
2. Add the Dependent variable: stock_level - merge with stock level data
   - ➢ Match both timestamp and product_id
   - ➢ Remove any entries w/ timestamps not shared in all
   - ➢ Explore possible correlations using exploratory/visualization tools
     - Possible predictive (independent variables): unit, temp, total, customer, product, etc.
3. Train/Test an ML Model
   - ➢ Break up the data
   - ➢ Import a sci-kit learn/other model and feed the data
   - ➢ Analyze correlations / relationships
4. Evaluate Results
   - ➢ Assess goal