# REPLICATION INSTRUCTIONS

#### **OBJECTIVE**

This document provides detailed instructions to replicate the experimental results given.

Steps to Replicate Results

# 1. Set Up Environment

- o Install Python (>=3.8) and required dependencies
- o pip install pandas numpy scikit-learn xgboost

# 2. Prepare Dataset

- Ensure datasets are stored in right folder. For example:
  C:\Users\chiam\OneDrive\Desktop\ISE\lab2\datasets.
- o Each dataset should be in CSV format.

# 3. Run Experiments

- Execute the first script to analyse datasets and train models: python CPL\_models.py to test all the other models and save to model performance results1.csv.
- Execute the script to analyse datasets and train the models, Linear regression and XGBoost: python Configuration\_Performance\_Learning.py.

### 4. Validate Results

- The output file model\_performance\_results.csv will contain the performance metrics for each dataset and model iteration.
- o Compare with previously saved results to verify replication.

By following these steps, you should be able to reproduce the reported results effectively.