Rubric for Machine Learning Assignment (Total: 5 Marks)

1. Data Cleaning and Preprocessing (1 Mark)

0.5 marks: Effective handling of errors.

0.5 marks: Appropriate feature selection and engineering.

2. Data Visualization and Observations (1 Mark)

0.5 marks: Creation of insightful visualizations that accurately represent the dataset.

0.5 marks: Clear and meaningful observations derived from the visualizations.

3. Model Development and Analysis (1.5 Marks)

0.5 marks: Implementation of multiple linear regression and polynomial regression models.

0.5 marks: Application of regularization techniques (Lasso, Ridge, etc.).

0.5 marks: Effective use of cross-validation and hyperparameter tuning.

4. Model Evaluation and Testing (1 Mark)

0.5 marks: Comprehensive evaluation of model performance using appropriate metrics.

0.5 marks: Testing the model on unseen data and providing a thorough analysis of results.

5. Documentation and Submission (0.5 Marks)

0.25 marks: Proper documentation of code and results, including comments and markdown cells in the notebook.

0.25 marks: Successful submission of the .pynb file to Moodle (not in a zip file) and upload to GitHub.