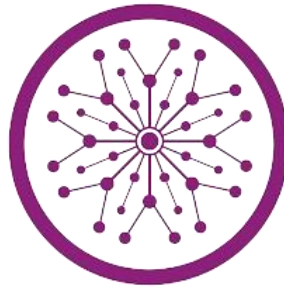


Programming for AI
Lab
Task 1



The Superior University
Faculty of Computer Science & Information Technology
2023-2027

Submitted To:

Sir Rasikh Ali

Submitted By:

Qaswa Chaudhary

Roll No:

SU92-BSDSM-F23-002

Section:

4A

Department:

Software Engineering

Kaggle Competition: House Price Prediction - Documentation

Introduction

This project aims to predict house prices using machine learning techniques. The dataset consists of training and test data, which undergo preprocessing before training a model. The workflow includes data loading, preprocessing, feature scaling, model selection, training, and evaluation.

Libraries Used

The following libraries are used in the project:

- `numpy`: For numerical computations
- `pandas`: For data handling and manipulation
- `sklearn.preprocessing.StandardScaler`: For feature scaling
- `sklearn.svm.SVR`: For Support Vector Regression modeling
- `sklearn.preprocessing.OrdinalEncoder`: For encoding categorical variables



Steps in script:

1. Importing Libraries
2. Loading Dataset
3. Data Exploration
4. **Data Preprocessing**
 - a. **Handling Missing Values**: Missing values are either imputed or removed based on the data characteristics.
 - b. **Feature Encoding**: Categorical variables are encoded using `OrdinalEncoder`.
 - c. **Feature Scaling**: Standardization is applied using `StandardScaler` to normalize numerical features.
5. Model Training
6. Model Evaluation
7. Creating a Submission File

Accuracy:

Qaswa Chaudhary
(002)-BSDS-4A

Sir Rasikh Ali
PAI Lab

	submission.csv Complete · 10d ago	59382.43527
	submission.csv Complete · 10d ago	29902.04115