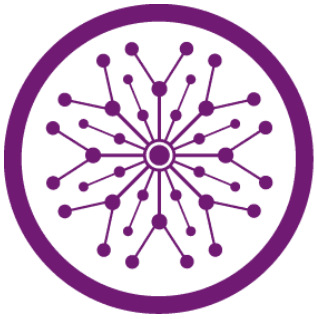

SUPERIOR UNIVERSITY

Name: Muhammad Ali
Roll No: SU92-BSAIM-F23-022
Section: BSAI-4A
Subject: Programming for Artificial Intelligence
Lab Task: 1

Task1: House Price Prediction

Libraries Used:

- `pandas` for handling tabular data.
- `numpy` for numerical data.
- `train_test_split` for splitting data into training and testing sets.
- `LabelEncoder` for encoding categorical variables.
- `LinearRegression` for building a regression model.

Dropped Values:

First of all, we have dropped all the unnecessary columns that we do not need/ or have no effect on pricing.
The Columns Include:

Id
Alley
PoolQC
Fence
MiscFeature

Filling Values:

Filled Null Values

- Where data type is object, the values are filled by using mode.
- Where data types are int/float (numeric), the values are filled by using median.

Label Encoding:

Because model works with numbers not text. We use label encoding to convert categorical value to numeric.

Train, Test, Split:

***Rest is splitting data*.**

***80 percent is used for training*.**

***20percent is used for testing*.**

Model:

Used *Linear Regression Model*.

Trained it using X_train and y_train.

At last tested data, and saved data in the sample submission.csv format.

Kaggle Submission:

Submitted the csv submission file to Kaggle.