Regression Analysis Guide

Purpose:

Predict house Sale Price based on Square Footage, Bedrooms, and Location Score.

Used multiple linear regression with Python and R to achieve this.

Data Retrieval:

- Dataset: "D600 Task 1 Dataset 1 Housing Information.csv"
- Loaded with pandas in Python and read.csv in R

Skills and Tools Used:

- Python (pandas, numpy, matplotlib, seaborn, statsmodels, sklearn)
- R (tidyverse, caret, GGally, car, MASS)
- Data cleaning, visualization, regression modeling, model optimization

Achievement:

- Built optimized regression models in Python and R
- Verified model assumptions
- Provided prediction results and MSE comparison
- Recommended real-world actions for pricing strategy

Files in this Package:

1. Regression_Analysis_Guide_WGU.pdf (this guide)
2. Regression_Analysis_Code.py (Python code)
3. Housing_Regression_R.R (R code)