**Python\_Lesson5: Python Programming**

**Lesson Overview:**

In this lesson we will review regression techniques

Regression techniques

1. Linear Regression
2. Multiple Regression

**Use Case Description:**

Multiple Linear Regression

**Programming elements:**

Linear Regression and Data Analysis

**Source Code:**

<https://umkc.box.com/s/0v0tsif4b8gm9fecx4xhwvfs2xqbgfzw>

**In class programming:**

1.Delete all the outlier data for the GarageArea field **(for the same data set in the use case: House Prices)**.

\* for this task you need to plot GaurageArea field and SalePrice in scatter plot, then check which numbers are anomalies.

2. Create Multiple Regression for the “**wine quality**” dataset. In this data set “quality” is the target label.

Evaluate the model using RMSE and R2 score.

<https://umkc.box.com/s/ohp4ys6b1gv1qa8wxh7infnzw13vjeso>

**\*\*** You need to delete the null values in the data set

**\*\*** You need to find the top 3 most correlated features to the target label(quality)

**Evaluation Criteria:**

1. Completeness of Features

2. Code Quality (<https://en.wikipedia.org/wiki/Best_coding_practices>)

3. Time

4. Feedback Submission

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