PROJECT RESULTS

The following are the results obtained from the Python codes used in this project.

Results from FixedAcidity_pH_Alcohol.py

Weight of the fixed acidity parameter:

0.1898837184314561

Weight of the pH parameter:

0.11162785618449181

Weight of the Alcohol parameter:

0.3524233861520091

Some random wine on the internet evaluate as standard wine, Santa Rita 120. Computed quality with our model:

5.874692400091181

Some random wine on the internet evaluate as standard wine, Joseph Carr. Computed quality with our model:

6.294903403313269

Results from VolatilAcidity_pH_Alcohol.py

Weight of the fixed volatil parameter:

0.01801433307023121

Weight of the pH parameter:

0.15782676678670243

Weight of the Alcohol parameter:

0.4883448585033991

Wine found on the internet that has actually won awards, Duckhorn. Computed quality qith our model:

7.832867317963371

Wine found on the internet that has actually won awards, Antler Hill. Computed quality qith our model:

7.999708111865959

Wine found on the internet that has actually won awards, Cune. Computed quality qith our model:

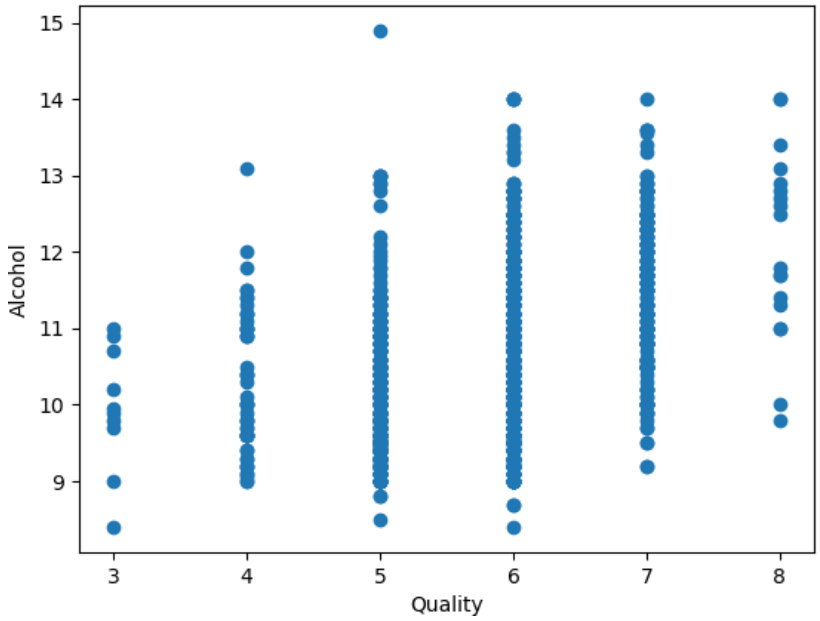
7.175611757442493

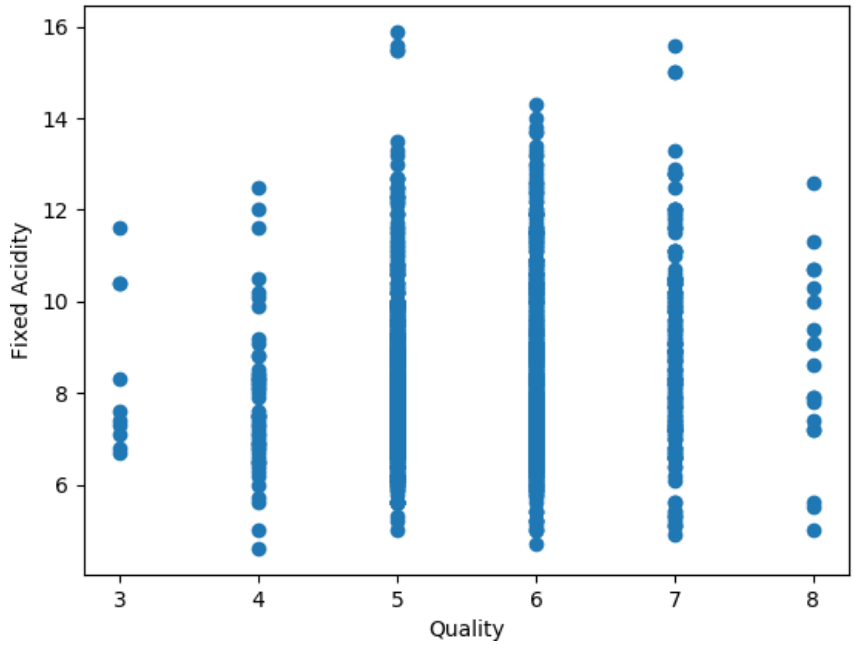
Results from error.py

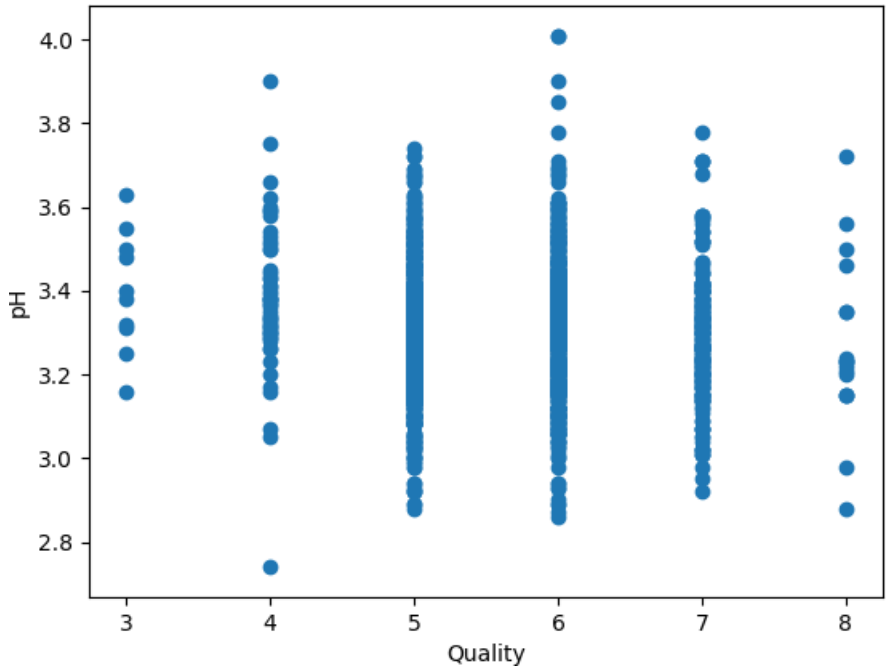
The value of the RMSE is: 0.758946638440411

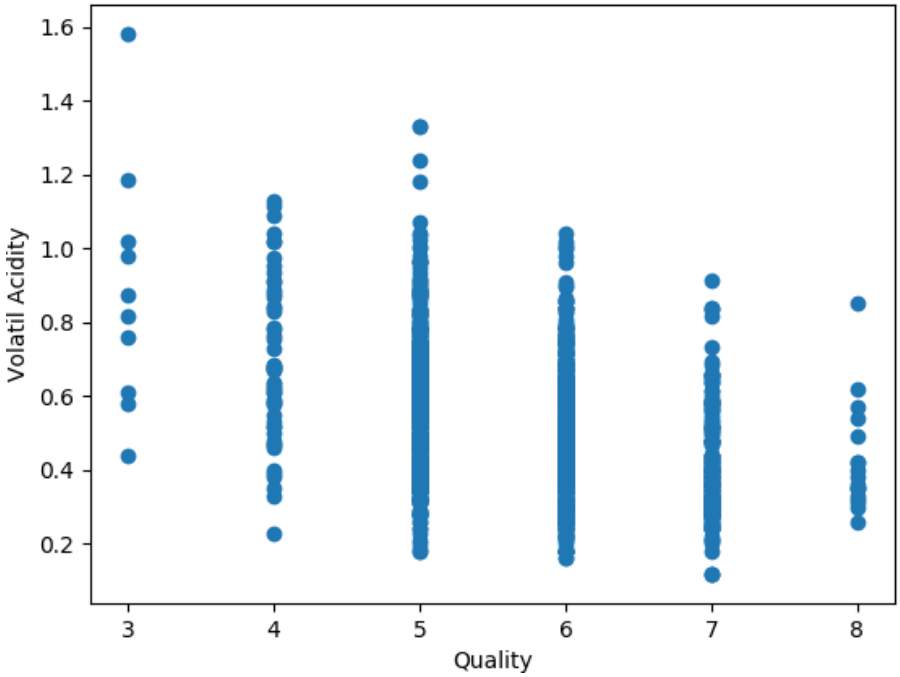
Results from graphs.py

We have considered the most important input features – fixed acidity, volatile acidity, pH and alcohol; that has significant impact on the quality of wine. Below are the graphs that gives relationship between input features and the quality.


Alcohol
Quality
15
14
13
12
11
10
9
3
4
5
6
7
8


Fixed Acidity
Quality
16
14
12
10
8
6
3
4
5
6
7
8


4.0
3.8
3.6
3.4
3.2
3.0
2.8
pH
3
4
5
6
7
8
Quality


1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
Volatil Acidity
3
4
5
6
7
8
Quality