Documenting Red and white wine quality prediction model

Using NumPy, Matplotlib and Pandas libraries, a prediction model for the quality of wine was built, the dataset consists of 1599 rows in red\_wine.csv and 4899 rows in white\_wine.csv, both of the datasets have 12 attributes which are:

Fixed acidity, volatile acidity, citric acid, residual sugar, chlorides, free sulfur dioxide, total sulfur dioxide, density, pH, sulphates, alcohol, quality.

The quality is the target attribute and it is scaled and rounded from 1 to 10.

Red wine: with the red wine dataset, alpha = 0.0001 seems to work well, with 30000 iterations, and the accuracy is not getting above 40.1225%

White wine: a bigger dataset than the first one, hits 98.5% accuracy with 15000 iterations and 0.00001 alpha. More iterations would be redundant

For both datasets, more iterations number does not change the value of Cost anymore.

The descriptions for the functions are commented beside each one.