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Report:

Task 1:

We can use logistic regression because only few discrete quality values are present.

Task 2:

$$r1 - r2 = 1.701$$

Stopping condition : after 1000 iterations of gradient descent we return the result.

$$r2 - r3 = 0.002724$$

Task 3:

$$\text{RMSE for } (p = 2) = 2.4899$$

$$\text{RMSE for } (p = 4) = 2.4888$$

Task 5:

Most co-related parameters are alcohol and chlorides which was observed by co-relation graph.

And least related are sulfur dioxides and pH.

These can also be observed by making scatter plots of quality v/s parameter.