* Are you satisfied that you have found the best solution? Explain.

We discovered that 1000 iterations and a 0.09 learning rate were the best for the model after a lot of trial and error.

We are pleased that we were able to construct a model using

MSE 26.4.

R2 of 0.28

RMSE of 5.17.

I believe that by using more data samples, we will be able to improve the score.

* Are you satisfied that the package has found the best solution. How can you check. Explain.

For the model using scikit-learn libraries, the below are some of the model evaluation scores,

MSE is 26.8

RMSE is 7.32

R2 score is 0.27

Performance of model can be verified using these metrics.

MSE is the average squared difference between the estimated values from the model and the actual value. An MSE score of 26.8 has good scope for improvement.

The R2 value is a statistical measure that indicates how much variation of a dependent variable(y) is explained by the independent variables (X) in a regression model. An R2 score of 0.27 indicates a decent model. It indicates that the dependent variable does not generally follow the feature vectors.

Overall, by training on bigger dataset we can improve the performance.