PROJECT REPORT

Link - <https://github.com/SaurabhSKM/ML-Taskphase.git>

In this project I have used different python functions for getting the values of the prediction, cost function, gradient descent and normalization of values.

For cost function and gradient descent I have used the standard mathematical function of them to compute their values respectively

I have used pandas to take the values from the dataset.

I have used all numeric values from the dataset and few categorical values by mapping my values (using the number for ordinal data method to use categorical value in linear regression on stackoverflow).

Weights have been initialized to random values and their values are calculated using gradient descent .

For calculating cost function and gradient the values of the functions have been normalized

After calculating the weights and cost function history , we show the cost function history on graph using matlplotlib.pyplot library and show the values of the predicted values vs the actual values in their normalized value.

Finally using sklearn we calculate the accuracy by calculating the R^2 value .