

Task - KNN from Scratch

Dataset - Click here to download the dataset: [diamonds.csv](#)

Data Description - [description.txt](#)

Task - Predict the diamond price. 💎

Write the KNN code from scratch and make it work on the given dataset ?

Step - 1: Load the data

Step - 2: Perform the EDA on the given dataset

Step - 3: Handle Categorical Columns i.e. convert them to numerical representation (TODO - Wisely choose between LabelEncoding and OneHotEncoding)

Step - 4: Normalise the data

Step - 5: Split the data - Test and Train (recommended 75:25 split)

Step - 6: Build KNN Algorithm from scratch and do the predictions for test data. You should not use the sklearn KNN algorithm here. Write the complete code implementation on KNN.

Step - 7: Evaluate your model

Step - 8: Train a model using sklearn KNN Algorithm and compare the results with your scratch implementation

Dos -

1. You can use sklearn for standardising and splitting the dataset to train and test
2. Scratch implementation of sklearn's KNN fit function
3. You can use library functions for LabelEncoder or OneHotEncoder
4. Use Jupyter Notebook to implement your work
5. Eat, Sleep, Code repeat

Don't -

1. Plagiarism
2. Procrastination