# 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:** Normalize 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 standardizing 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