• Question/Problem statement:

- o How to create a regression model to predict the price of diamonds?
- O What is the best seller of diamonds?

• Data Description:

This dataset contains of 10 variables and 53940 rows. We will perform regression model to predict the price of diamonds.

• Data type:

- o **Price:** in US dollars
- o Carat: weight of the diamond
- o Cut: quality of the cut (Fair, Good, Very Good, Premium, Ideal)
- o Color: quality of the cut (Fair, Good, Very Good, Premium, Ideal)
- o **Clarity:** a measurement of how clear the diamond is (I1 (worst), SI2, SI1, VS2, VS1, VVS2, VVS1, IF (best))
- o **x:** length in mm
- o **y:** width in mm
- o **z**: depth in mm
- o **Depth:** total depth percentage
- o **Table:** width of top of diamond relative to widest point

• Data size:

No. of rows: 53940
No. of columns: 10

• Tools:

- Web scraping: Beautiful Soup
- o Programs: Python Jubyter Notebook
- o Libraries: pandas, Seaborn, Matplotlib, scikit-learn

• MVP Goal:

The goal of this project is to perform regression model to predict the price of diamonds.