

Project 3



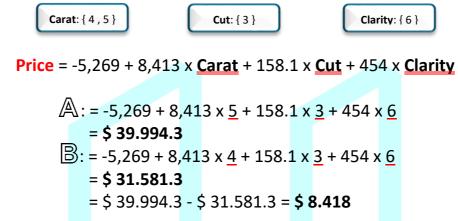
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Diamond Prices

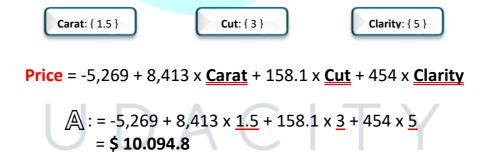
> Understanding the Model:

According to the model, if a diamond is carat heavier than another with the same cut, how much more should I expect to pay? Why?



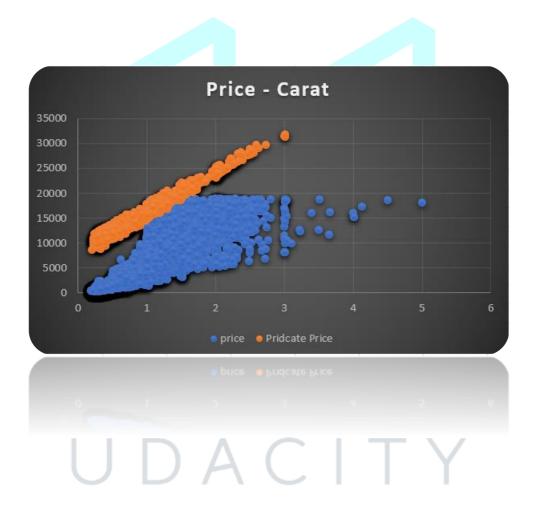
The carat price is \$8.418

If you were interested in a 1.5 carat diamond with a **Very Good** cut (represented by a 3 in the model) and a **VS2** clarity rating (represented by a 5 in the model), how much would the model predict you should pay for it?



> Visualize the Data:

- Plot 1 Plot the data for the diamonds in the database, with carat on the x-axis and price on the y-axis
- Plot 2 Plot the data for the diamonds for which you are predicting prices with carat on the x-axis and predicted price on the y-axis.



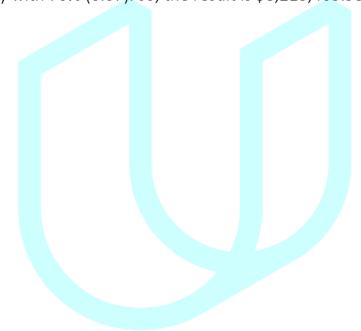
What strikes you about this comparison? After seeing this plot, do you feel confident in the model's ability to predict prices?

Yes, firstly because there is a good correlation between the carat and price, and this makes when the price of a carat increases, the price also increases.

> Make a Recommendation:

What price do you recommend the jewelry company to bid? Please explain how you arrived at that number.

My recommend the jewelry company to bid \$8,213,465.93 because when I sum the predicted prices is equal \$11,733,522.76 and when I multiply with 70% (0.07). so, the result is \$8,213,465.93.



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