STA 321 Final Project

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Part 1: Planning

Does data adhere to rules (yes):

Data contains 50 observations per predictor	-
Response var is quantitative	-
6-10 predictor variables	-
3 predictors are quantitative	-
1 predictor is categorical	-

research question: "what variables influence the price of Diamonds?" using various qualities of a diamond in the data set attached.

response variable: Diamond price

predictor variables:

Variable Name	Variable Type	Range	Possible Categories
Carat	Quantitative	(0.2-5.01)	
Cut	Categorical		Fair, Good, Very Good, Premium, Ideal
Color	Categorical		D, E, I, J, H, F, J
Clarity	Categorical		I1 (worst), SI2, SI1, VS2, VS1, VVS2, VVS1, IF (best)
Depth	Quantitative	(43-79)	
table	Quantitative	(43-95)	
X	Quantitative	(0-10.74)	
Y	Quantitative	(0-58.9)	
Z	quantitative	(0-31.8)	

source: https://ggplot2.tidyverse.org/reference/diamonds.html for finding data, then https://www.kaggle.com/shivam2503/diamonds for csv of data