House Price Analysis

Question	Points	Comments
1. Develop a categorization of your data using pivot tables. Develop two pivot tables of average price and average square feet by type of construction (brick) and neighborhood (20%)	20	Excellent
2. Using the two pivot tables above, generate pivot charts for average price and average square feet by type of construction (brick) and neighborhood (10%)	10	Excellent
3. Perform a correlation analysis of all quantitative variables except ID. Which two variables have the largest magnitude correlation? Which two variables have the smallest magnitude correlation? What does the largest magnitude imply if we perform a regression analysis next? Are there any negative correlations? Are these correlations intuitive? If not, why not? (20%)	20	Excellent
4. Perform an initial regression analysis of the quantitative variables excluding the ID. Which variables are statistically significant? What does each coefficient mean in a real-world sense? Are these coefficients intuitive? If not, why not? What does the R-squared mean? (15%)	15	Excellent
5. Perform a second regression including variables from part 4 and dummy variables for type of construction and neighborhood. What does each coefficient mean in a real-world sense? Are these coefficients intuitive? If not, why not? What does the R-squared mean? (10%)	10	Excellent
6 Create a spreadsheet prediction of the regression model from part 5. Perform a two-way sensitivity analysis and use conditional formatting to highlight the results. (15%)	13	Predictions and sensitivity analysis are only valid within the range of the original data; bathrooms should be limited to 2-4
7. What would explain non-intuitive results in your regression using the data which you were provided? What additional data would assist you in explaining the non-intuitive results? (10%)	10	Excellent
Total	98	Excellent