Techniques and Tools for Business Analytics:

Assignment 1

**Part A. [25 marks]**

Think of a situation from your work/life where you can use business analytics to make a decision or answer a business question. Analyze the situation (based on the Business Analytics Life Cycle taught in class) and write your answer in the below format:

* Business Understanding - Description of the Problem/Question
* Data Understanding Required
* Data Preparation Required
* Modeling Technique(s) Suitable
* Evaluation Techniques Required

You MUST justify and explain every item as to how they are suitable to the situation and problem you mentioned. Be as specific as possible with your data, without compromising data confidentiality.

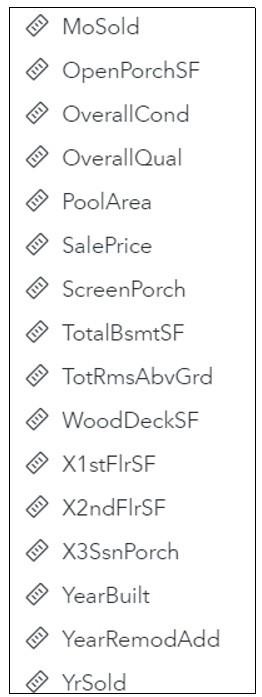
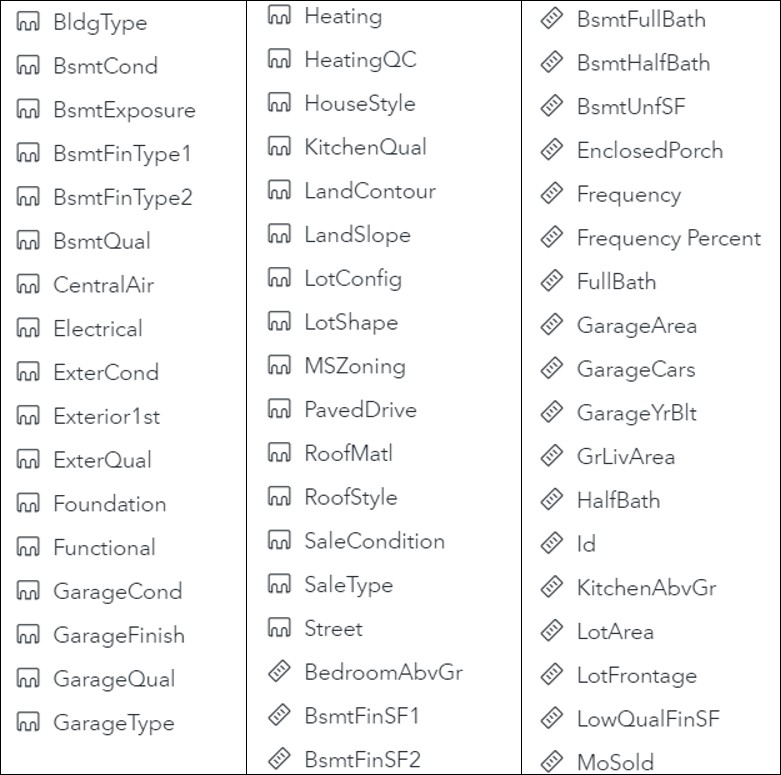
**Part B. [75 marks]**

You are given a dataset of selling prices of houses along with many of their features. You may use the dataset in SAS Viya called **HOUSEPRICE or** use the.csv file provided on the Moodle site. As a MINIMUM, you are required to do the following:

* Review the dataset and describe it
* Build a suitable model to predict the Selling Price of a House
* Identify and list the important predictors that determine the selling price of a house
* Write out the model equation in full and explain it
* List and explain at least 3 model evaluation techniques required for your model
* Report the evaluation results of your model
* Suggest how the model can be improved further. Demonstrate it.
* List some limitations of the modeling technique you used.
* How can the limitations be overcome?

Your answer MUST include answers to ALL the above parts including texts and figures/charts from SAS Viya/ any other software approved by the lecturer.

The List of Attributes of the dataset is as below:



**Grading Rubric**

