**Applied Artificial Intelligence Project – 5**

**Part 1 :**

Setting-up the Environment and Run the code:

1. The code is in .ipynb file format which runs on Anaconda Jupyter Notebook.

Code would run by clicking on Cells > Run All.

1. This file can also be opened using PyCharm IDE. Once loaded, the imported libraries need to be added from File > Settings > Project Interpreter.

Select the path for the interpreter. Add all the required libraries using plus sign at the right hand side of screen. Apply the same. The code would run on clicking ‘Run’ or ‘Shift+F5’

1. The code can run in the Kernel of the Zillow Prize: Zillow’s Home Value Prediction (Zestimate). The paths must be changed to (../input/data.csv) while reading the files. Commit and Run.

**Part 2:**

Techniques Used In the Project:

* The train and properties data are merged. The ‘NaN’ values are changed to ‘-9999’. The select\_dtypes(exclude = [object]) excludes those features that include ‘string’ values.
* The data is then split in X\_train and y\_train.
* The Decision Tree Regressor is used for tuning the parameters for optimal solutions.
* The preprocessing steps are again applied to the properties to maintain the number of columns in both input and processed dataframe.
* The sample\_submission provided is merged with the properties to create Test data.
* The Submission is then converted into the required format and stored in a .csv file.

**Result:**

