BUS 640 Assignment #9

Due Date: 7/14/2024 (by 11:59 PM)

Write a Python program that reads the *houisePrices.csv* file found on the BUS 640 Canvas site and conforms to the specifications described below. The *housePrices.csv* file contains information about individual house prices. The file has the fields (columns) shown in the table below.

Field Name	Description
Overall Qual	Overal Quality Rating of the House
Overall Cond	Overall Condition Rating of the House
Year Built	Year the House was Built
Total Bsmt SF	Total Square Feet of the Basement
Total Liv Area	Total Living Area of the House
Full Bath	Number of Full Bathrooms in the House
Half Bath	Number of Half Bathrooms in the House
Bedroom AbvGr	Number of Bedrooms Above Ground in the House
TotRms AbvGrd	Total Number of Rooms Above Ground in the House
Garage Area	Total Square Feet of the Garage
SalePrice	Sale Price of the House

Assignment Specifications:

- 1. Create three different multiple linear regression models that have the attributes described below:
 - a. The dependent variable for each of the models should be the sale price (SalePrice) of the house.
 - b. Each of the models should contain multiple independent variables, but no individual model should contain more than three independent variables. At least one of the independent variables in each model must be different from the independent variables in the other models.
- 2. The root Mean Squared Error for each of the models should be no greater than 36000.
- 3. The adjust R Squared value for each of the models should be greater than 0.78,
- 4. Print the following for each of the three models:
 - a. Root Mean Squared Error
 - b. R Squared Value
 - c. Adjusted R Squared Value