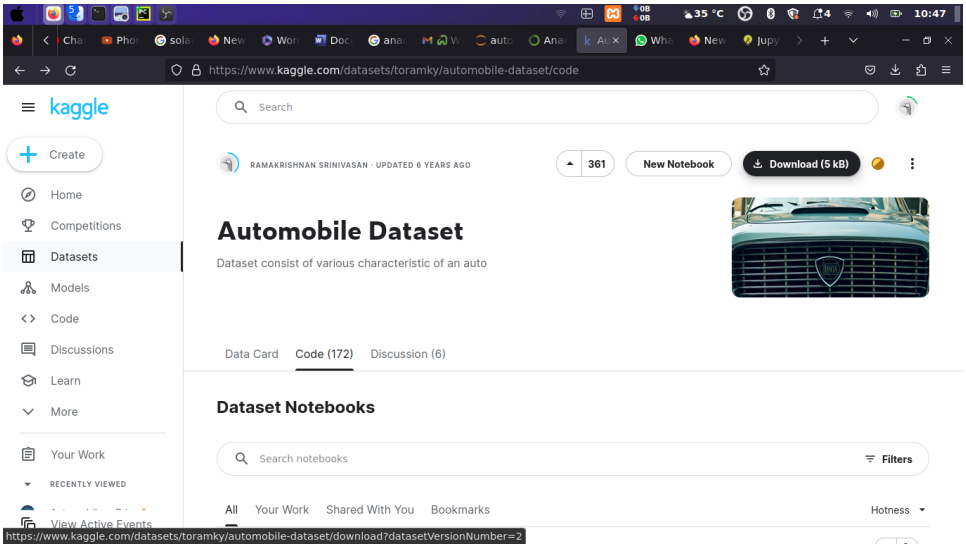
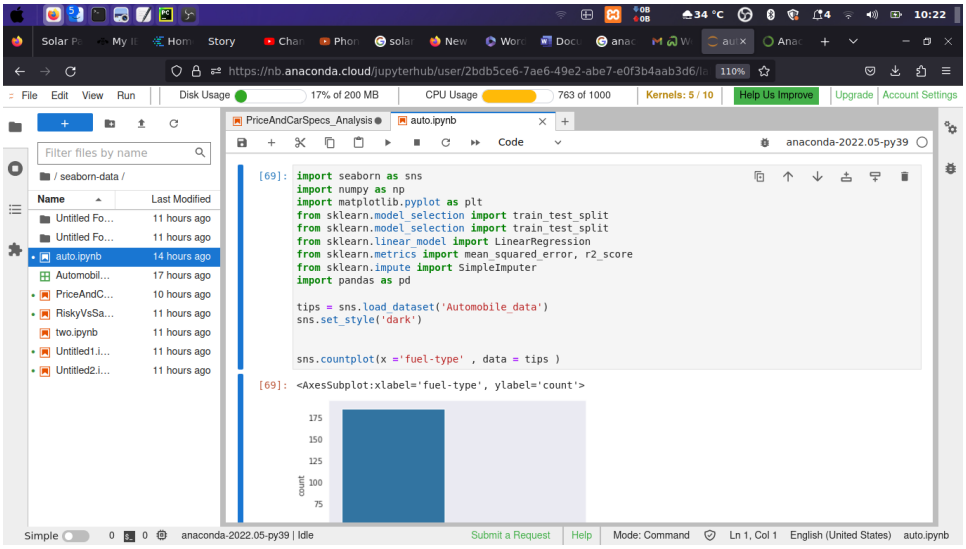
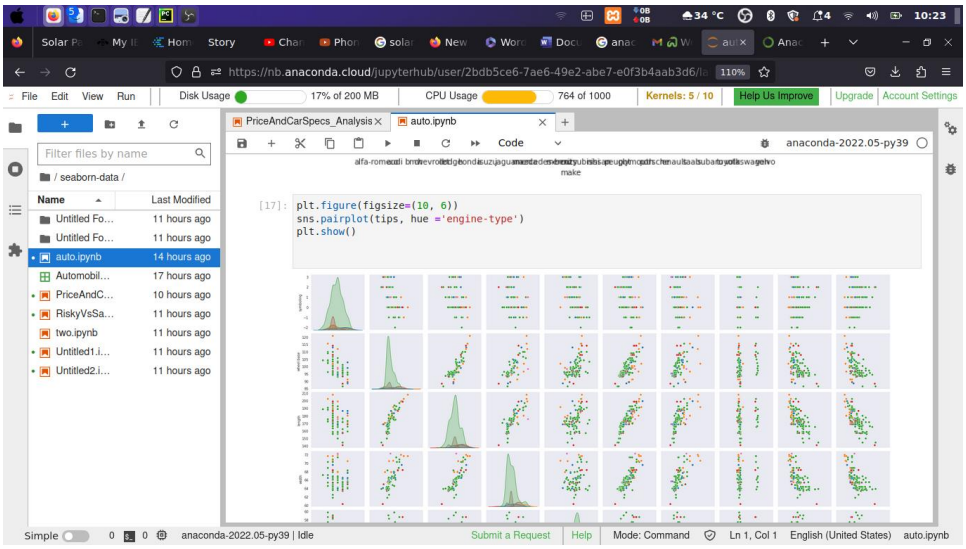
Step 1 : Download the dataset



Step 2: import libraries and read the csv using pandas



Step 3: perform Univariate,bivariate and Tri variate analysis


PriceAndCarSpecs_Analysis
auto.ipynb
Code
anaconda-2022.05-py39
[17]:
plt.figure(figsize=(10, 6))
sns.pairplot(tips, hue ='engine-type')
plt.show()
Filter files by name
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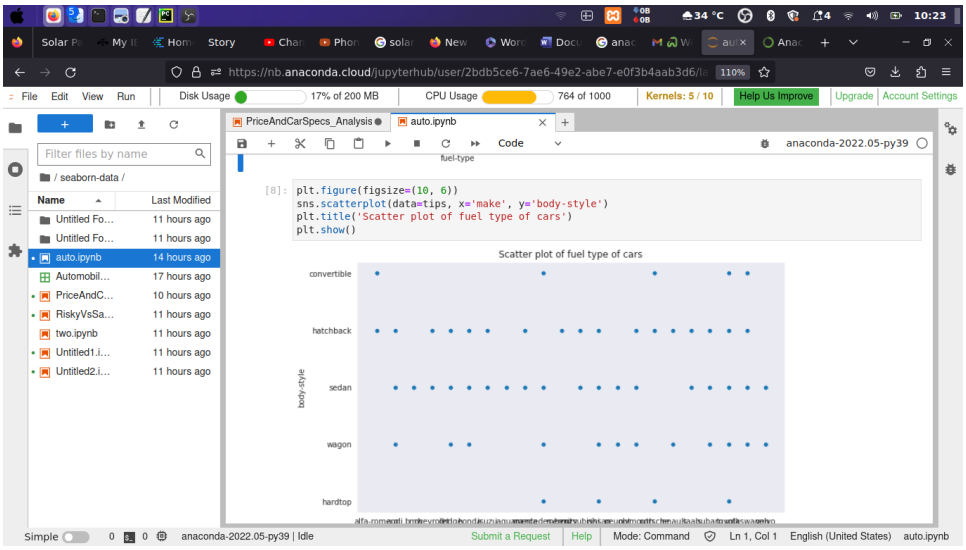
PriceAndCarSpecs_Analysis
auto.ipynb
Code
anaconda-2022.05-py39
[8]:
plt.figure(figsize=(10, 6))
sns.scatterplot(data=tips, x='make', y='body-style')
plt.title('Scatter plot of fuel type of cars')
plt.show()
Scatter plot of fuel type of cars
convertible
hatchback
sedan
wagon
hardtop
body-style
Simple
anaconda-2022.05-py39 | Idle
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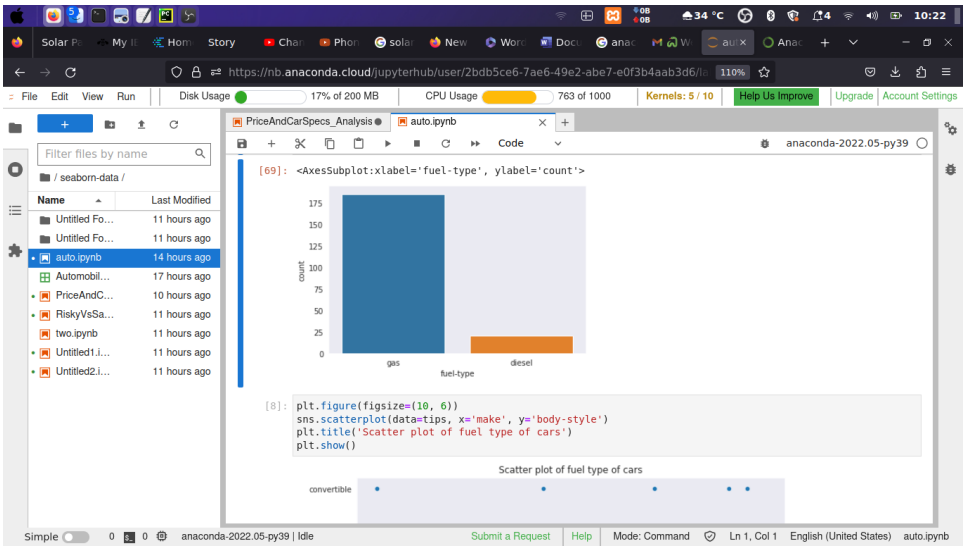
PriceAndCarSpecs_Analysis
auto.ipynb
Code
anaconda-2022.05-py39
[69]:
<AxesSubplot:xlabel='fuel-type', ylabel='count'>
count
fuel-type
gas
diesel
[8]:
plt.figure(figsize=(10, 6))
sns.scatterplot(data=tips, x='make', y='body-style')
plt.title('Scatter plot of fuel type of cars')
plt.show()
Scatter plot of fuel type of cars
convertible
Simple
anaconda-2022.05-py39 | Idle
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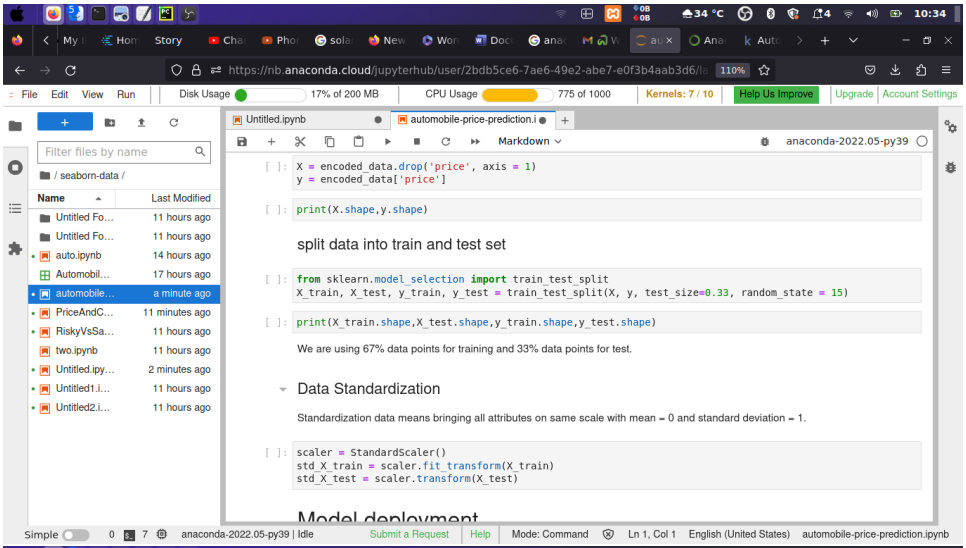
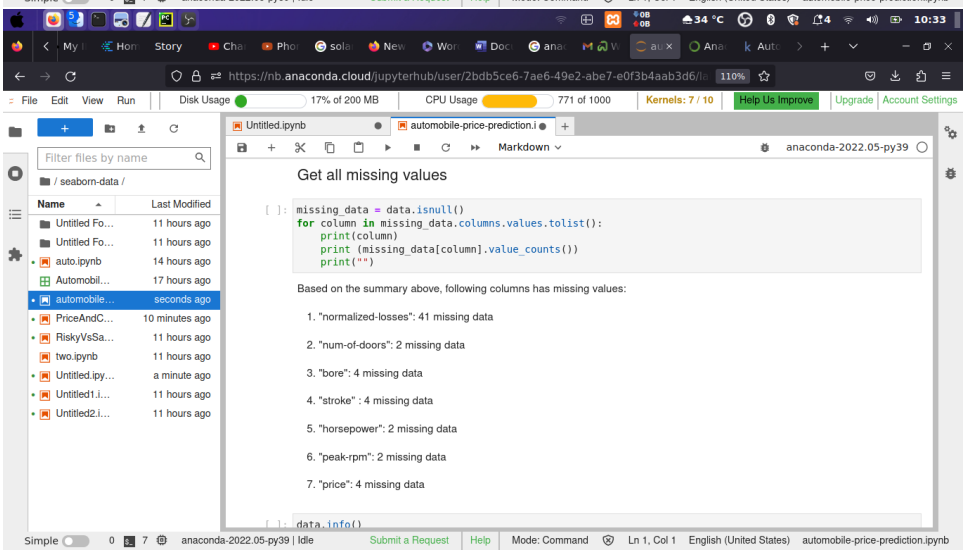
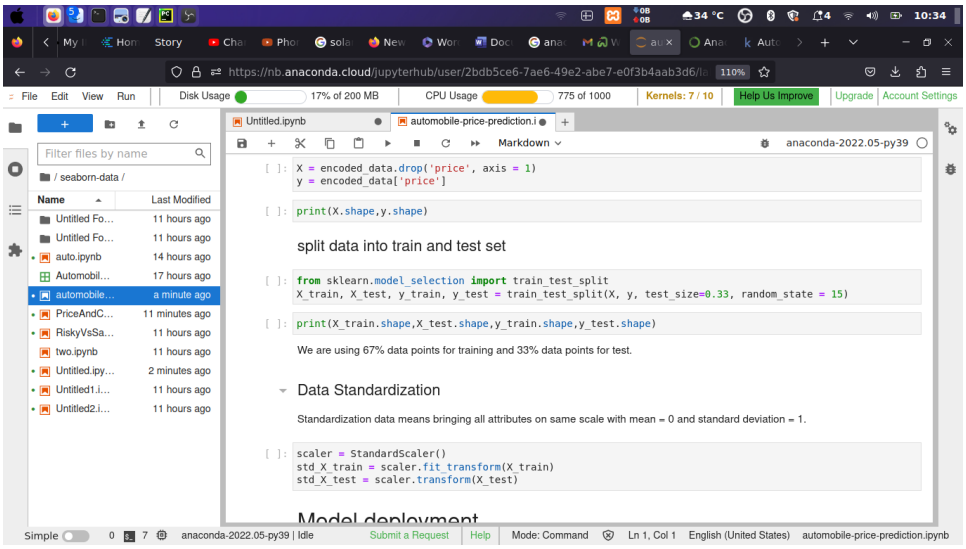
Step 4: next Handaling the missing value and spliting the data

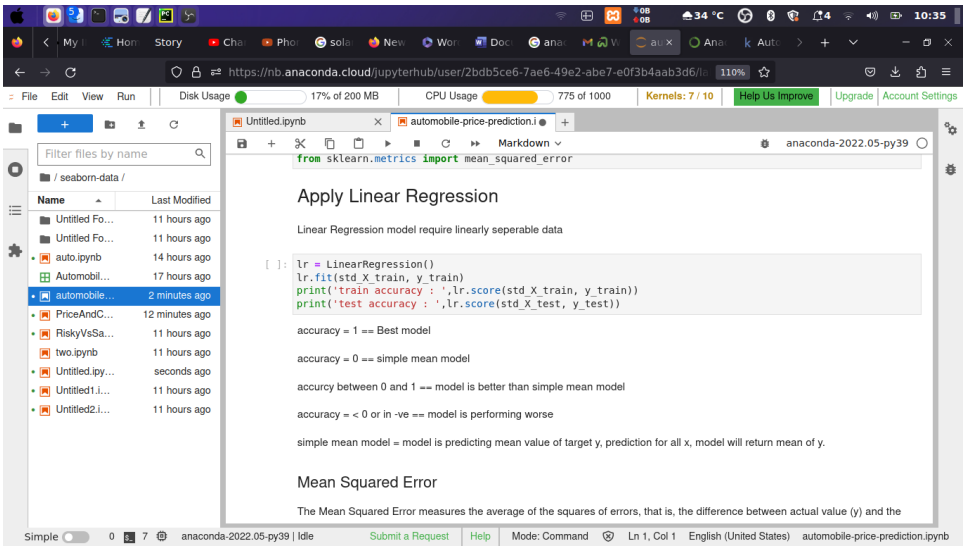


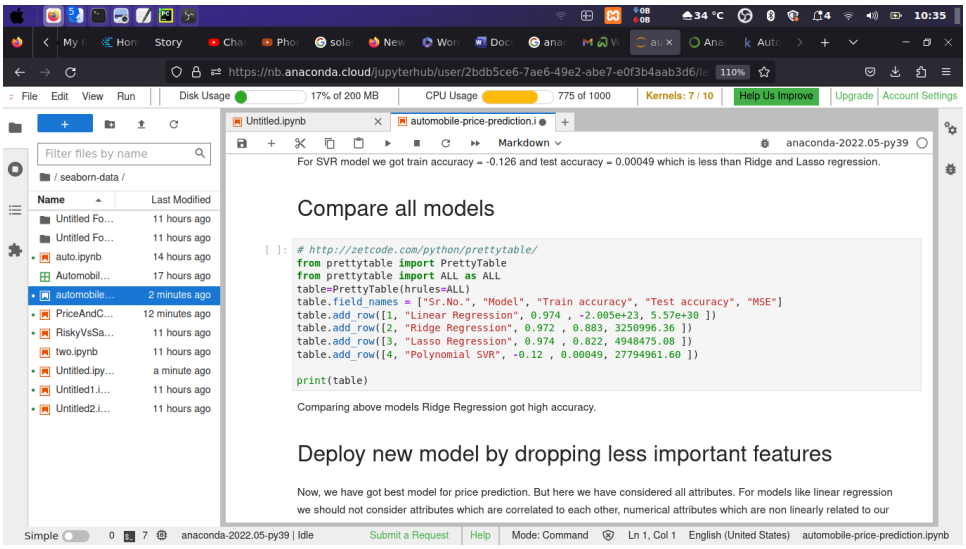


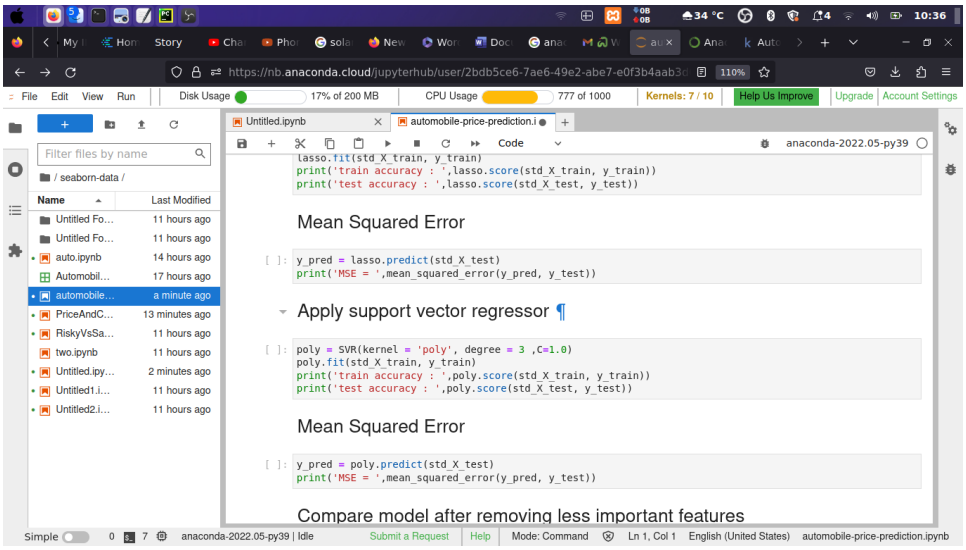
Step 5 : Handaling catogorial variable and standard scaling



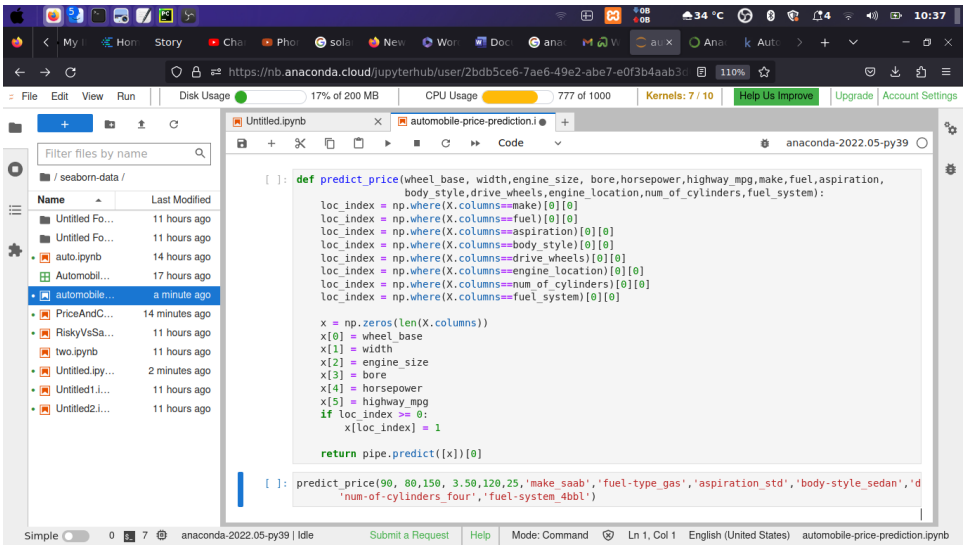
Step 6: apply linear regression







STEP 7 : Prediction based on above models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Disk Usage 17% of 200 MB
CPU Usage 777 of 1000
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Account Settings
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Automobil… 17 hours ago
automobile… a minute ago
PriceAndC… 14 minutes ago
RiskyVsSa… 11 hours ago
two.ipynb 11 hours ago
Untitled.ipy… 2 minutes ago
Untitled1.i… 11 hours ago
Untitled2.i… 11 hours ago
[ ]:
def predict_price(wheel_base, width,engine_size, bore,horsepower,highway_mpg,make,fuel,aspiration,
body_style,drive_wheels,engine_location,num_of_cylinders,fuel_system):
loc_index = np.where(X.columns==make)[0][0]
loc_index = np.where(X.columns==fuel)[0][0]
loc_index = np.where(X.columns==aspiration)[0][0]
loc_index = np.where(X.columns==body_style)[0][0]
loc_index = np.where(X.columns==drive_wheels)[0][0]
loc_index = np.where(X.columns==engine_location)[0][0]
loc_index = np.where(X.columns==num_of_cylinders)[0][0]
loc_index = np.where(X.columns==fuel_system)[0][0]
x = np.zeros(len(X.columns))
x[0] = wheel_base
x[1] = width
x[2] = engine_size
x[3] = bore
x[4] = horsepower
x[5] = highway_mpg
if loc_index >= 0:
x[loc_index] = 1
return pipe.predict([x])[0]
[ ]:
predict_price(90, 80,150, 3.50,120,25,'make_saab','fuel-type_gas','aspiration_std','body-style_sedan','d
'num-of-cylinders_four','fuel-system_4bbl')
Simple
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English (United States)
automobile-price-prediction.ipynb