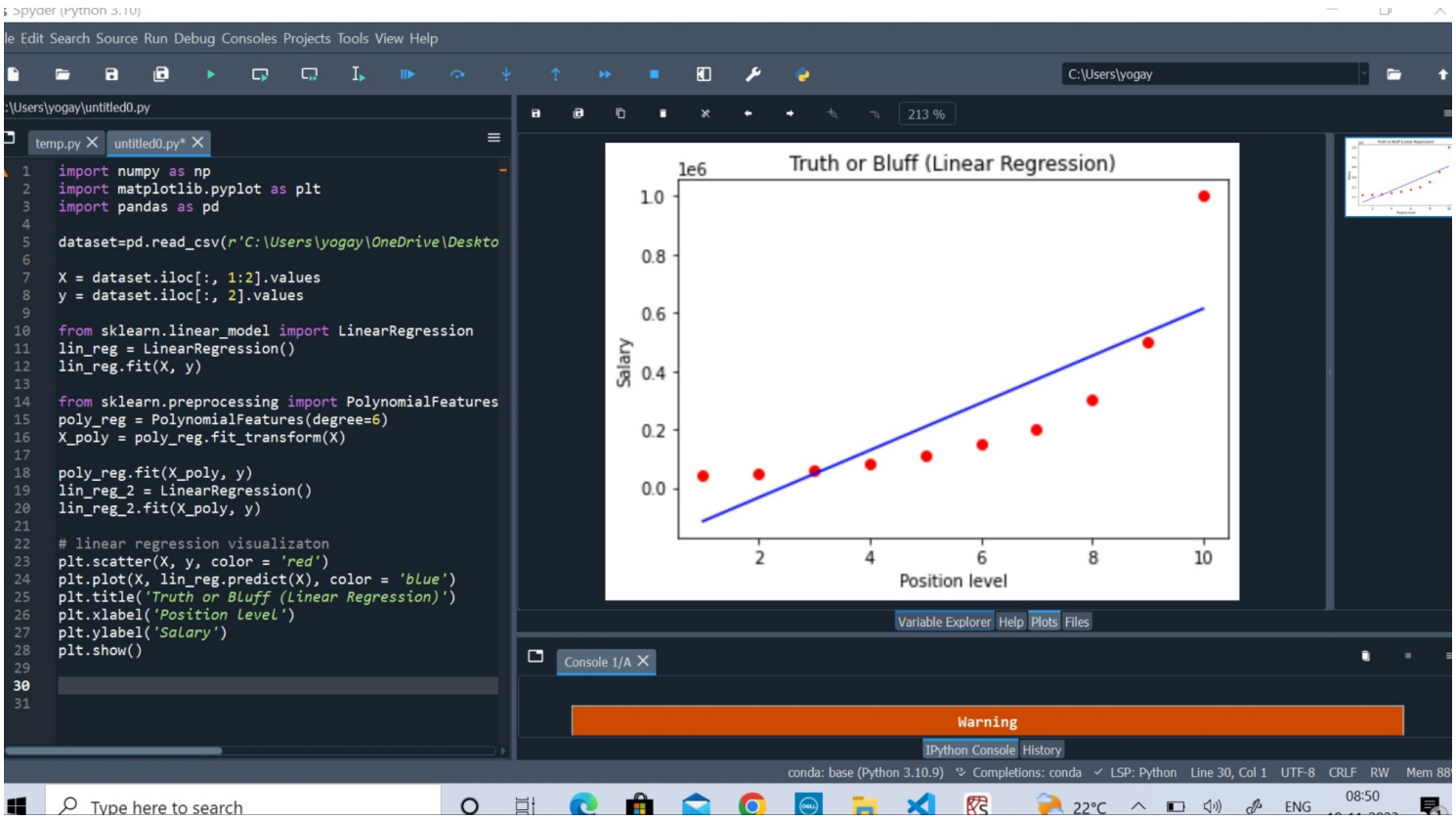
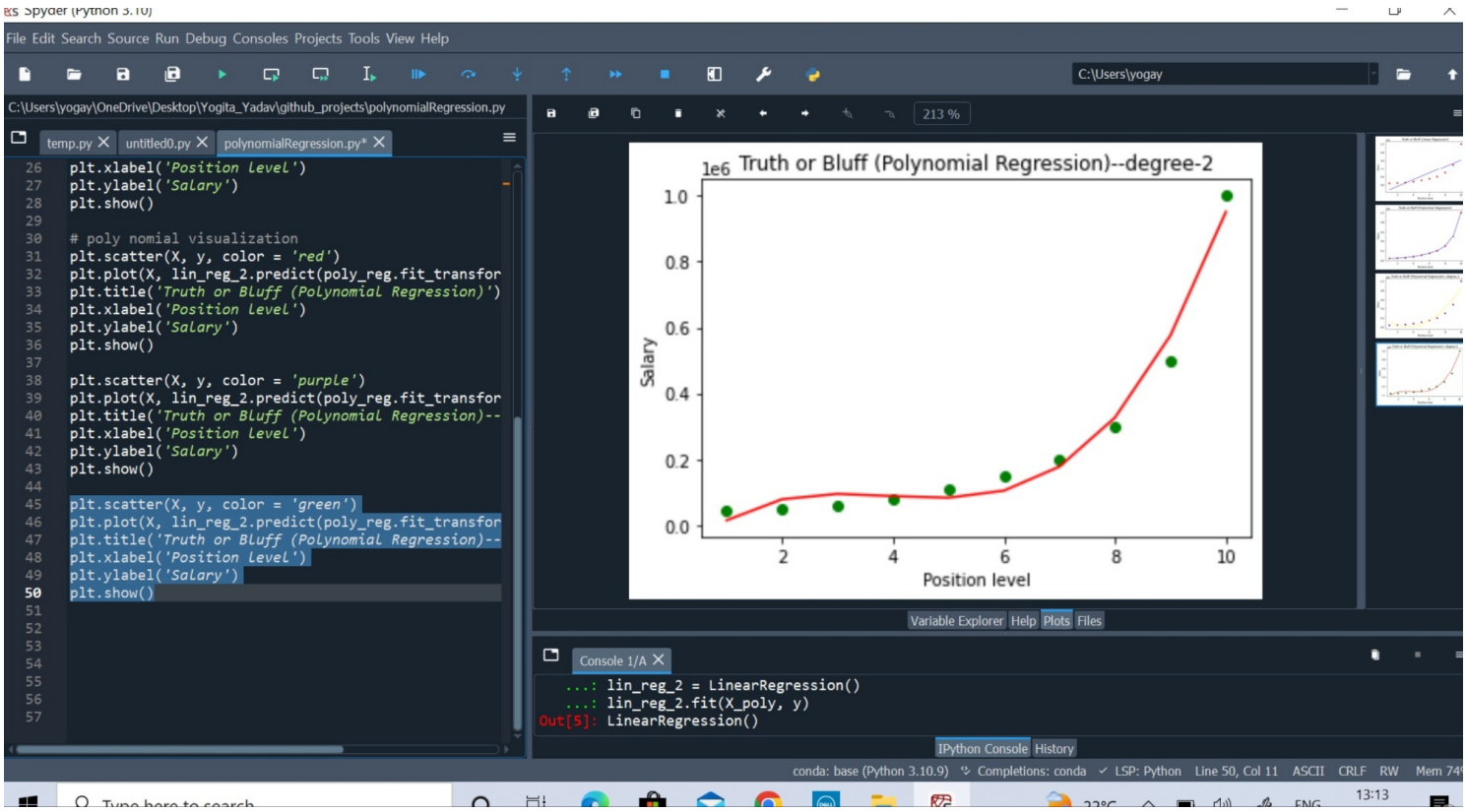
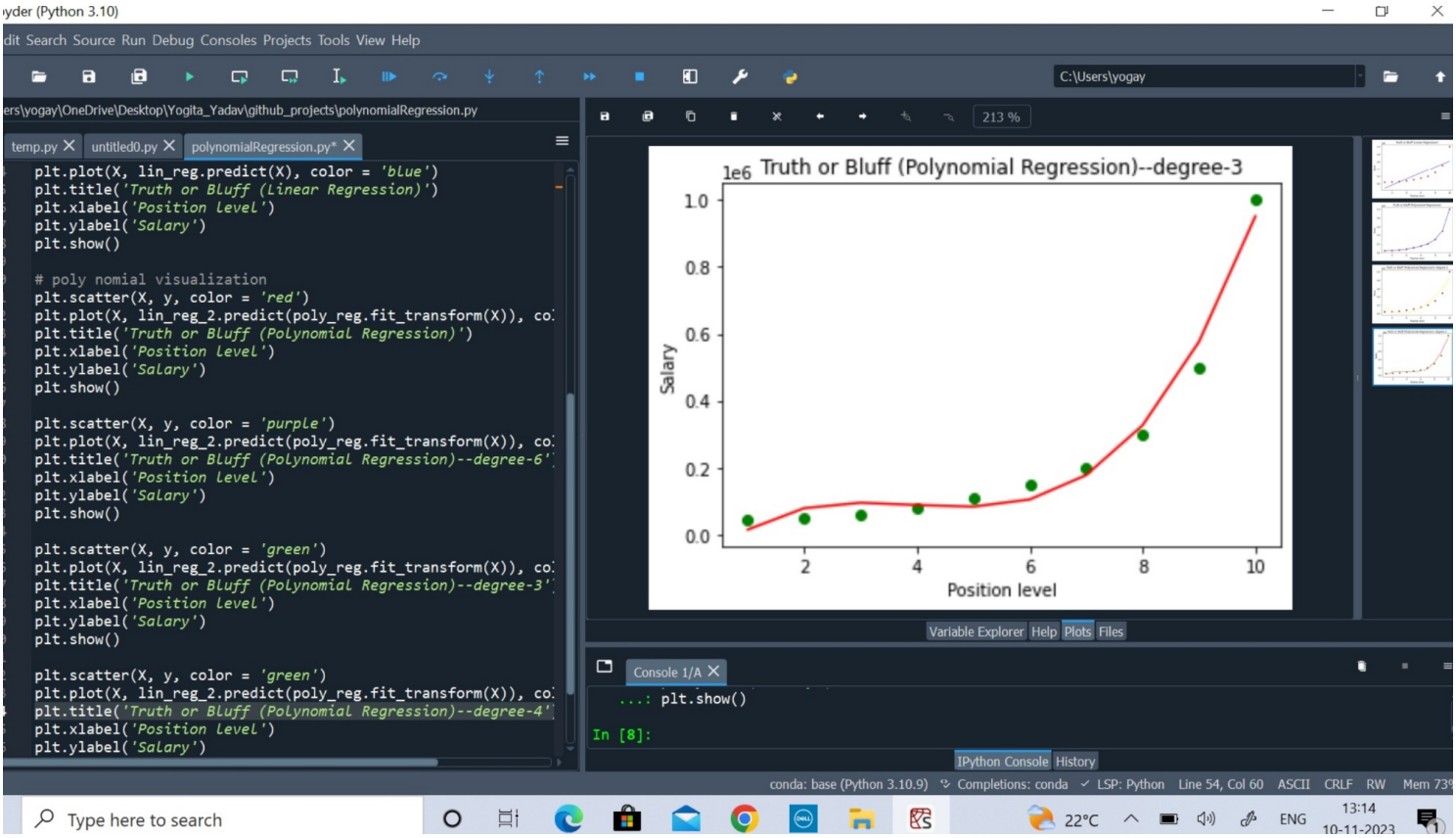
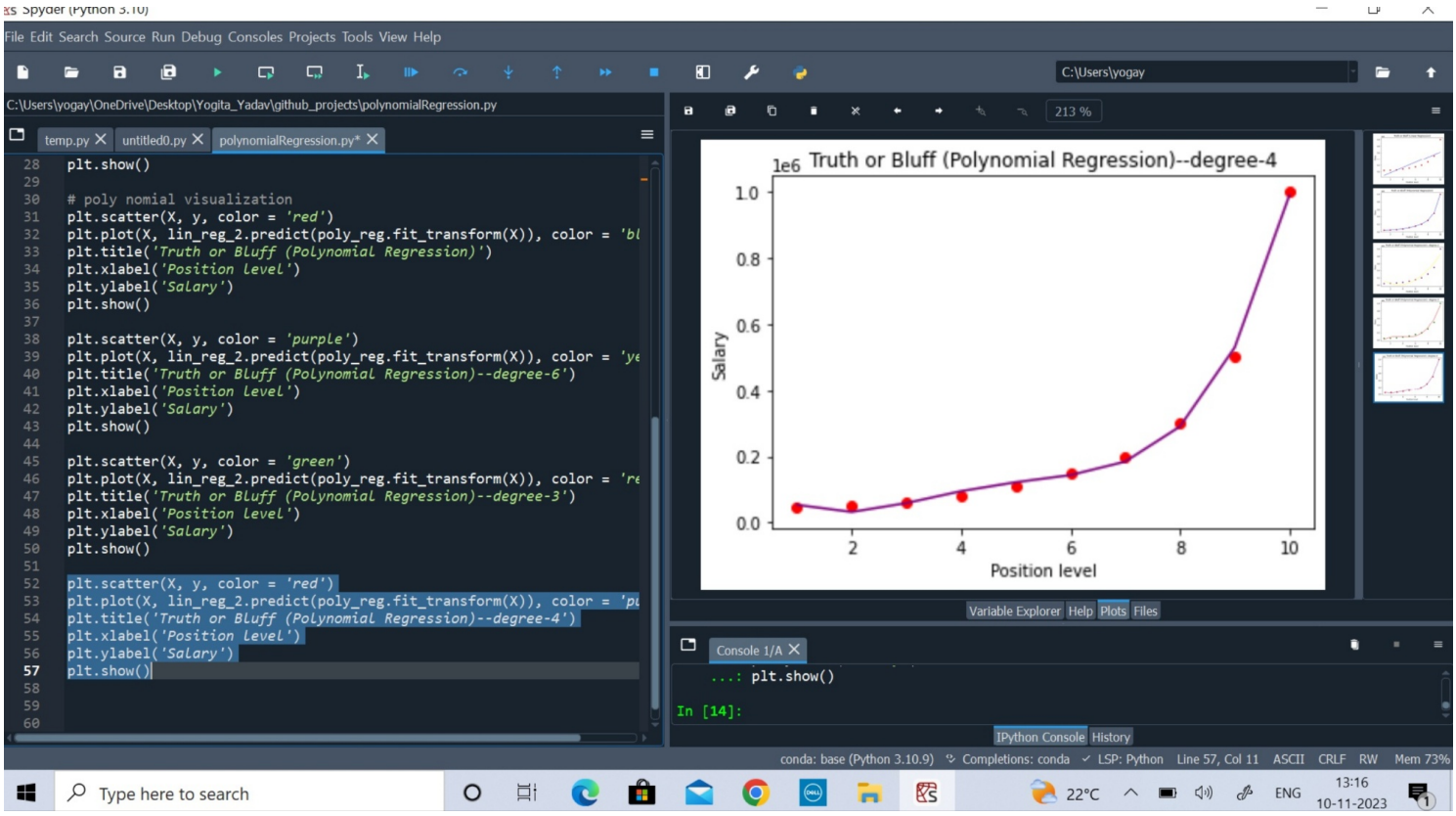
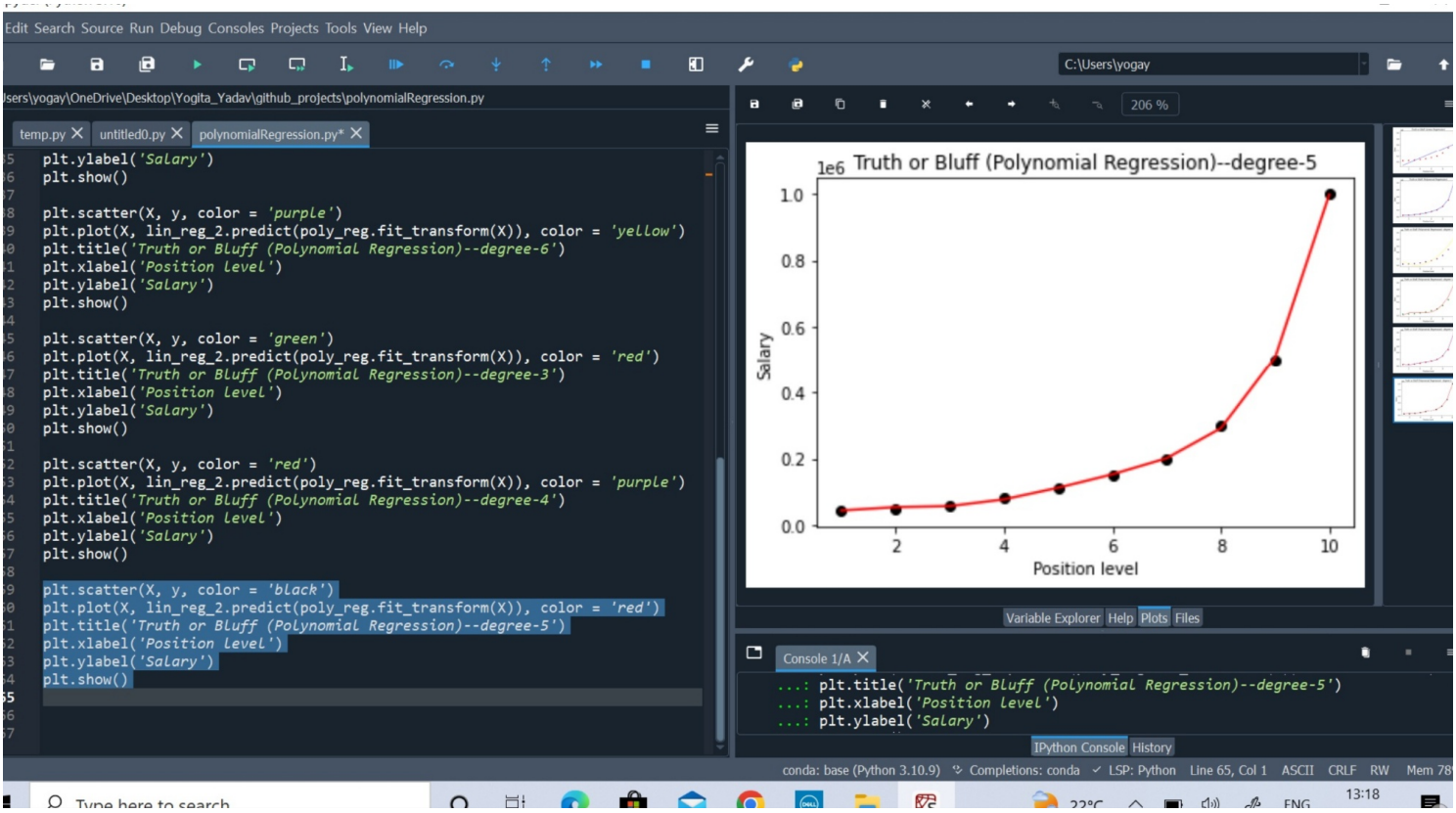

Spyder (Python 3.10)
File Edit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\yogay
C:\Users\yogay\untitled0.py
temp.py
untitled0.py*
213 %
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
dataset=pd.read_csv(r'C:\Users\yogay\OneDrive\Deskto
X = dataset.iloc[:, 1:2].values
y = dataset.iloc[:, 2].values
from sklearn.linear_model import LinearRegression
lin_reg = LinearRegression()
lin_reg.fit(X, y)
from sklearn.preprocessing import PolynomialFeatures
poly_reg = PolynomialFeatures(degree=6)
X_poly = poly_reg.fit_transform(X)
poly_reg.fit(X_poly, y)
lin_reg_2 = LinearRegression()
lin_reg_2.fit(X_poly, y)
# linear regression visualizaton
plt.scatter(X, y, color = 'red')
plt.plot(X, lin_reg.predict(X), color = 'blue')
plt.title('Truth or Bluff (Linear Regression)')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
Truth or Bluff (Linear Regression)
1e6
1.0
0.8
0.6
0.4
0.2
0.0
Salary
2
4
6
8
10
Position level
Variable Explorer
Help
Plots
Files
Console 1/A
Warning
IPython Console
History
conda: base (Python 3.10.9)
Completions: conda
LSP: Python
Line 30, Col 1
UTF-8
CRLF
RW
Type here to search
22°C
ENG
08:50


Spyder (Python 3.10)
File Edit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\yogay
C:\Users\yogay\OneDrive\Desktop\Yogita_Yadav\github_projects\polynomialRegression.py
temp.py
untitled0.py
polynomialRegression.py*
213 %
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
# poly nomial visualization
plt.scatter(X, y, color = 'red')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transfor
plt.title('Truth or Bluff (Polynomial Regression)')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'purple')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transfor
plt.title('Truth or Bluff (Polynomial Regression)--
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'green')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transfor
plt.title('Truth or Bluff (Polynomial Regression)--
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
1e6
Truth or Bluff (Polynomial Regression)--degree-2
Salary
Position level
Variable Explorer
Help
Plots
Files
Console 1/A
...: lin_reg_2 = LinearRegression()
...: lin_reg_2.fit(X_poly, y)
Out[5]: LinearRegression()
IPython Console
History
conda: base (Python 3.10.9)
Completions: conda
LSP: Python
Line 50, Col 11
ASCII
CRLF
RW
Mem 74%
13:13


yder (Python 3.10)
dit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\yogay
ers\yogay\OneDrive\Desktop\Yogita_Yadav\github_projects\polynomialRegression.py
temp.py
untitled0.py
polynomialRegression.py*
plt.plot(X, lin_reg.predict(X), color = 'blue')
plt.title('Truth or BLuff (Linear Regression)')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
# poly nomial visualization
plt.scatter(X, y, color = 'red')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), co
plt.title('Truth or Bluff (Polynomial Regression)')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'purple')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), co
plt.title('Truth or BLuff (Polynomial Regression)--degree-6'
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'green')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), co
plt.title('Truth or BLuff (Polynomial Regression)--degree-3'
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'green')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), co
plt.title('Truth or BLuff (Polynomial Regression)--degree-4'
plt.xlabel('Position Level')
plt.ylabel('Salary')
213 %
1e6
Truth or Bluff (Polynomial Regression)--degree-3
Salary
Position level
1.0
0.8
0.6
0.4
0.2
0.0
2
4
6
8
10
Variable Explorer
Help
Plots
Files
Console 1/A
...: plt.show()
In [8]:
IPython Console
History
conda: base (Python 3.10.9)
Completions: conda
LSP: Python
Line 54, Col 60
ASCII
CRLF
RW
Mem 73%
Type here to search
22°C
ENG
13:14
10-11-2023


Spyder (Python 3.10)
File Edit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\yogay\OneDrive\Desktop\Yogita_Yadav\github_projects\polynomialRegression.py
temp.py
untitled0.py
polynomialRegression.py*
plt.show()
# poly nomial visualization
plt.scatter(X, y, color = 'red')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), color = 'bl
plt.title('Truth or BLuff (Polynomial Regression)')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'purple')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), color = 'ye
plt.title('Truth or BLuff (Polynomial Regression)--degree-6')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'green')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), color = 're
plt.title('Truth or BLuff (Polynomial Regression)--degree-3')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'red')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), color = 'pu
plt.title('Truth or BLuff (Polynomial Regression)--degree-4')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
C:\Users\yogay
213 %
1e6
Truth or Bluff (Polynomial Regression)--degree-4
Salary
Position level
Variable Explorer
Help
Plots
Files
Console 1/A
...: plt.show()
In [14]:
IPython Console
History
conda: base (Python 3.10.9)
Completions: conda
LSP: Python
Line 57, Col 11
ASCII
CRLF
RW
Mem 73%
Type here to search
22°C
ENG
13:16
10-11-2023


Edit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\yogay
Users\yogay\OneDrive\Desktop\Yogita_Yadav\github_projects\polynomialRegression.py
temp.py
untitled0.py
polynomialRegression.py*
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'purple')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), color = 'yellow')
plt.title('Truth or Bluff (Polynomial Regression)--degree-6')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'green')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), color = 'red')
plt.title('Truth or Bluff (Polynomial Regression)--degree-3')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'red')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), color = 'purple')
plt.title('Truth or Bluff (Polynomial Regression)--degree-4')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
plt.scatter(X, y, color = 'black')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), color = 'red')
plt.title('Truth or Bluff (Polynomial Regression)--degree-5')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()
206 %
1e6
Truth or Bluff (Polynomial Regression)--degree-5
Salary
Position level
Variable Explorer
Help
Plots
Files
Console 1/A
...: plt.title('Truth or Bluff (Polynomial Regression)--degree-5')
...: plt.xlabel('Position Level')
...: plt.ylabel('Salary')
IPython Console
History
conda: base (Python 3.10.9)
Completions: conda
LSP: Python
Line 65, Col 1
ASCII
CRLF
RW
Mem 78
Type here to search
ENG
13:18

Spyder (Python 3.10)

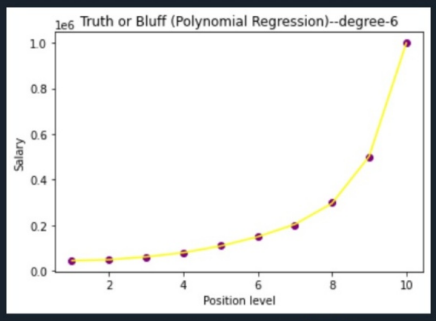
Edit Search Source Run Debug Consoles Projects Tools View Help

C:\Users\yogay

Users\yogay\OneDrive\Desktop\Yogita_Yadav\github_projects\polynomialRegression.py

temp.py | untitled0.py | polynomialRegression.py*

```
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd

dataset=pd.read_csv(r'C:\Users\yogay\OneDrive\Desktop\Yogita_Yadav\L

X = dataset.iloc[:, 1:2].values
y = dataset.iloc[:, 2].values

from sklearn.linear_model import LinearRegression
lin_reg = LinearRegression()
lin_reg.fit(X, y)

from sklearn.preprocessing import PolynomialFeatures
poly_reg = PolynomialFeatures(degree=6)
X_poly = poly_reg.fit_transform(X)

poly_reg.fit(X_poly, y)
lin_reg_2 = LinearRegression()
lin_reg_2.fit(X_poly, y)

# linear regression visualizaton
plt.scatter(X, y, color = 'red')
plt.plot(X, lin_reg.predict(X), color = 'blue')
plt.title('Truth or Bluff (Linear Regression)')
plt.xlabel('Position Level')
plt.ylabel('Salary')
plt.show()

# poly nomial visualization
plt.scatter(X, y, color = 'red')
plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), color = 'b
plt.title('Truth or Bluff (Polynomial Regression)')
```



Variable Explorer | Help | Plots | Files

Console 1/A

Figures now render in the Plots pane by default. To make them also appear inline in the Console, uncheck "Mute Inline Plotting" under the Plots pane options menu.

```
In [2]: plt.scatter(X, y, color = 'purple')
   ...: plt.plot(X, lin_reg_2.predict(poly_reg.fit_transform(X)), color = 'yellow')
   ...: plt.title('Truth or Bluff (Polynomial Regression)--degree-6')
   ...: plt.xlabel('Position Level')
   ...: plt.ylabel('Salary')
   ...: plt.show()
```

IPython Console | History

conda: base (Python 3.10.9) | Completions: conda | LSP: Python | Line 15, Col 39 | ASCII | CRLF | RW | Mem 75%

Type here to search | 22°C | ENG | 13:08 | 10-11-2023