```
# -*- coding: utf-8 -*-
"""
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"""

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

dataset = pd.read_csv(r"C:\Users\ttwrd\Downloads\emp_sal.csv")
x=dataset.iloc[:,1:2].values
y=dataset.iloc[:,2].values


from sklearn.linear_model import LinearRegression
regressor = LinearRegression()
regressor.fit(x,y)

#plt.scatter(x,y,color='red')

#plt.plot(x,regressor.predict(x),color='blue')
#plt.xlabel("position level")
#plt.ylabel('salary')
#plt.show()

lin_pred=regressor.predict([[6.5]])
print(lin_pred)

from sklearn.preprocessing   import PolynomialFeatures
#poly_reg=PolynomialFeatures()
poly_reg=PolynomialFeatures(degree=5)# degree 5 gives accurate prediction
#poly_reg=PolynomialFeatures(degree=3)
x_poly=poly_reg.fit_transform(x)

poly_reg.fit(x_poly,y)

lin_reg2=LinearRegression()
lin_reg2.fit(x_poly,y)
plt.scatter(x,y,color='red')

plt.plot(x,lin_reg2.predict(poly_reg.fit_transform(x)),color='blue')

poly_model_pred=lin_reg2.predict(poly_reg.fit_transform([[6.5]]))
print(poly_model_pred)
```