1. Data Appearance for the first two rows , it shows the total count of rotary rigs and Corresponding oil price

Date Rig\_count Oil\_Price

0 5/1/20 348 28.56

1 4/1/20 565 16.55

1. Linear Model:

coefficient of determination: 0.6679123318444212

intercept: [-18.1679938]

slope: [[0.05612373]]



Fig.1. Linear Regression of Oil Price vs. Rig Count

1. Improved Linear model

coefficient of determination: 0.8167222163668669

intercept: [18.73666677]

slope: [[0.04006255]]



Fig.2. Improved Linear regression of all data

1. Less data selected linear training model

Coefficients: [[0.04092595]]

Mean squared error: 66.17

Coefficient of determination: 0.37



Fig. 3 Less data Trained Data Linear training

1. Polynomial model

Mean squared error: 15.866785321410013

coefficient of determination: 0.7005679318941365



Figure. 4\_Poly\_reg pow 2 of all data