

Polynomial Regression Coefficients:

[0.00000000e+00 1.79367551e+03 -4.35238806e+01 3.09867581e-01]

Linear Regression Coefficients:

[118.2143111]

Exponential Regression Parameters:

[3.65078509e-05 2.38343006e-01 4.81274813e+02]

Polynomial Features Matrix:

[[1.00000000e+00 6.50000000e+01 4.22500000e+03 2.74625000e+05]
[1.00000000e+00 5.99000000e+01 3.58801000e+03 2.14921799e+05]
[1.00000000e+00 5.99000000e+01 3.58801000e+03 2.14921799e+05]
[1.00000000e+00 5.95000000e+01 3.54025000e+03 2.10644875e+05]
[1.00000000e+00 5.92000000e+01 3.50464000e+03 2.07474688e+05]
[1.00000000e+00 5.88000000e+01 3.45744000e+03 2.03297472e+05]
[1.00000000e+00 5.86000000e+01 3.43396000e+03 2.01230056e+05]
[1.00000000e+00 5.81000000e+01 3.37561000e+03 1.96122941e+05]
[1.00000000e+00 5.75000000e+01 3.30625000e+03 1.90109375e+05]
[1.00000000e+00 5.73000000e+01 3.28329000e+03 1.88132517e+05]
[1.00000000e+00 5.73000000e+01 3.28329000e+03 1.88132517e+05]
[1.00000000e+00 5.70000000e+01 3.24900000e+03 1.85193000e+05]
[1.00000000e+00 5.67000000e+01 3.21489000e+03 1.82284263e+05]
[1.00000000e+00 5.62000000e+01 3.15844000e+03 1.77504328e+05]
[1.00000000e+00 5.53000000e+01 3.05809000e+03 1.69112377e+05]
[1.00000000e+00 5.48000000e+01 3.00304000e+03 1.64566592e+05]
[1.00000000e+00 7.78000000e+01 6.05284000e+03 4.70910952e+05]
[1.00000000e+00 7.75000000e+01 6.00625000e+03 4.65484375e+05]
[1.00000000e+00 7.72000000e+01 5.95984000e+03 4.60099648e+05]
[1.00000000e+00 7.69000000e+01 5.91361000e+03 4.54756609e+05]
[1.00000000e+00 7.66000000e+01 5.86756000e+03 4.49455096e+05]
[1.00000000e+00 7.62000000e+01 5.80644000e+03 4.42450728e+05]
[1.00000000e+00 7.61000000e+01 5.79121000e+03 4.40711081e+05]
[1.00000000e+00 7.53000000e+01 5.67009000e+03 4.26957777e+05]
[1.00000000e+00 7.59000000e+01 5.76081000e+03 4.37245479e+05]
[1.00000000e+00 7.42000000e+01 5.50564000e+03 4.08518488e+05]
[1.00000000e+00 7.35000000e+01 5.40225000e+03 3.97065375e+05]
[1.00000000e+00 7.30000000e+01 5.32900000e+03 3.89017000e+05]
[1.00000000e+00 7.28000000e+01 5.29984000e+03 3.85828352e+05]
[1.00000000e+00 7.33000000e+01 5.37289000e+03 3.93832837e+05]
[1.00000000e+00 7.36000000e+01 5.41696000e+03 3.98688256e+05]
[1.00000000e+00 7.26000000e+01 5.27076000e+03 3.82657176e+05]
[1.00000000e+00 7.56000000e+01 5.71536000e+03 4.32081216e+05]
[1.00000000e+00 7.54000000e+01 5.68516000e+03 4.28661064e+05]
[1.00000000e+00 7.53000000e+01 5.67009000e+03 4.26957777e+05]
[1.00000000e+00 7.51000000e+01 5.64001000e+03 4.23564751e+05]
[1.00000000e+00 7.49000000e+01 5.61001000e+03 4.20189749e+05]
[1.00000000e+00 7.47000000e+01 5.58009000e+03 4.16832723e+05]

[1.00000000e+00 7.44000000e+01 5.53536000e+03 4.11830784e+05]
[1.00000000e+00 7.41000000e+01 5.49081000e+03 4.06869021e+05]
[1.00000000e+00 7.38000000e+01 5.44644000e+03 4.01947272e+05]
[1.00000000e+00 7.34000000e+01 5.38756000e+03 3.95446904e+05]
[1.00000000e+00 7.29000000e+01 5.31441000e+03 3.87420489e+05]
[1.00000000e+00 7.23000000e+01 5.22729000e+03 3.77933067e+05]
[1.00000000e+00 7.17000000e+01 5.14089000e+03 3.68601813e+05]
[1.00000000e+00 7.16000000e+01 5.12656000e+03 3.67061696e+05]
[1.00000000e+00 7.14000000e+01 5.09796000e+03 3.63994344e+05]
[1.00000000e+00 7.13000000e+01 5.08369000e+03 3.62467097e+05]
[1.00000000e+00 5.24000000e+01 2.74576000e+03 1.43877824e+05]
[1.00000000e+00 5.17000000e+01 2.67289000e+03 1.38188413e+05]]

Original Features Matrix:

[[65.]
[59.9]
[59.9]
[59.5]
[59.2]
[58.8]
[58.6]
[58.1]
[57.5]
[57.3]
[57.3]
[57.]
[56.7]
[56.2]
[55.3]
[54.8]
[77.8]
[77.5]
[77.2]
[76.9]
[76.6]
[76.2]
[76.1]
[75.3]
[75.9]
[74.2]
[73.5]
[73.]
[72.8]
[73.3]
[73.6]
[72.6]
[75.6]
[75.4]

[75.3]

[75.1]

[74.9]

[74.7]

[74.4]

[74.1]

[73.8]

[73.4]

[72.9]

[72.3]

[71.7]

[71.6]

[71.4]

[71.3]

[52.4]

[51.7]]

R-squared (Polynomial): 0.43

R-squared (Linear): 0.30

R-squared (Exponential): 0.41