```
1. Adding x2, FStat = 6.258, pValue = 0.013009
ans =
Linear regression model:
  y \sim 1 + x2
Estimated Coefficients:
                       SE
           Estimate
                              tStat
                                       pValue
  (Intercept) -0.09616 0.062511 -1.5383
                                                0.12525
  x2
             0.24417 0.097604
                                    2.5016 0.013009
Number of observations: 250, Error degrees of freedom: 248
Root Mean Squared Error: 0.228
R-squared: 0.0246, Adjusted R-Squared 0.0207
F-statistic vs. constant model: 6.26, p-value = 0.013
1. Adding x2, FStat = 28.7596, pValue = 1.87642e-07
ans =
Linear regression model:
  y \sim 1 + x^2
Estimated Coefficients:
                       SE
                                       pValue
           Estimate
                              tStat
  (Intercept)
             -0.24609 0.080122 -3.0715
                                                0.0023675
  x2
             0.67089
                         0.1251
                                   5.3628 1.8764e-07
Number of observations: 250, Error degrees of freedom: 248
Root Mean Squared Error: 0.292
R-squared: 0.104, Adjusted R-Squared 0.1
F-statistic vs. constant model: 28.8, p-value = 1.88e-07
1. Adding x2, FStat = 35.1741, pValue = 1.0071e-08
ans =
Linear regression model:
  y \sim 1 + x2
Estimated Coefficients:
           Estimate
                                       pValue
                       SE
                              tStat
             -0.31619 0.091181 -3.4677
                                                0.00061861
  (Intercept)
  x2
             0.84436
                        0.14237
                                   5.9308 1.0071e-08
```

Number of observations: 250, Error degrees of freedom: 248

Root Mean Squared Error: 0.333

R-squared: 0.124, Adjusted R-Squared 0.121

F-statistic vs. constant model: 35.2, p-value = 1.01e-08 1. Adding x2, FStat = 32.3245, pValue = 3.6554e-08

ans =

Linear regression model:

 $y \sim 1 + x2$

Estimated Coefficients:

Estimate SE tStat pValue

(Intercept) -0.28978 0.096608 -2.9996 0.0029789 x2 0.85761 0.15084 5.6855 3.6554e-08

Number of observations: 250, Error degrees of freedom: 248

Root Mean Squared Error: 0.352

R-squared: 0.115, Adjusted R-Squared 0.112

F-statistic vs. constant model: 32.3, p-value = 3.66e-08

>>