```
-------------------------------------------------------------------------
-------------
      name:  <unnamed>
       log:  /Users/maximiannecastaneda/Desktop/Econometrics Final
Paper/Data Set/fi
> nal.txt
  log type:  text
 opened on:   5 May 2020, 15:12:02

.
. gen logcurp = log(curp)
(968 missing values generated)

. summarize logcurp months rating perl platforms multi

    Variable |        Obs        Mean    Std. Dev.       Min
Max
-------------
+--------------------------------------------------------
     logcurp |         31    3.354675    .6242149   1.607436
4.094178
      months |         31     35.6129    26.02009          6
90
      rating |         31    4.196774    .6605472        2.8
4.8
        perl |         31    91.15259    17.57786   15.23311
99.37913
   platforms |         31    2.548387    1.286823          1
7
-------------
+--------------------------------------------------------
       multi |         31    .7419355    .4448027          0
1

. //main model
. regress logcurp months rating perl platforms multi

      Source |       SS           df       MS      Number of obs   =
31
-------------+----------------------------------   F(5, 25)        =
4.92
       Model |  5.79842474         5  1.15968495   Prob > F        =
0.0028
    Residual |  5.89090076        25   .23563603   R-squared       =
0.4960
-------------+----------------------------------   Adj R-squared   =
0.3953
       Total |  11.6893255        30  .389644183   Root MSE
=    .48542
```

```
------------------------------------------------------------------------
--------
     logcurp |      Coef.   Std. Err.      t    P>|t|     [95% Conf.
Interval]
-------------
+----------------------------------------------------------------
      months |  -.0112459    .003594    -3.13   0.004    -.0186478
-.003844
      rating |   .3185373   .1539162     2.07   0.049
.001541    .6355336
        perl |   .0126656   .0055224     2.29   0.030
.001292    .0240392
   platforms |   -.040076   .0720399    -0.56   0.583
-.1884449    .1082929
       multi |   .1492098   .2084766     0.72   0.481
-.2801559    .5785754
       _cons |   1.255263   .7734017     1.62   0.117    -.3375876
2.848114
------------------------------------------------------------------------
--------

.
. //ommitted variable, talk about theoretically.
.
. //irrelevant variable : platform availability
. regress logcurp months rating perl multi

      Source |       SS           df       MS      Number of obs   =
31
-------------+----------------------------------   F(4, 26)        =
6.24
       Model |  5.72550176         4  1.43137544   Prob > F        =
0.0012
    Residual |  5.96382374        26  .229377836   R-squared       =
0.4898
-------------+----------------------------------   Adj R-squared   =
0.4113
       Total |  11.6893255        30  .389644183   Root MSE
=    .47893

------------------------------------------------------------------------
--------
     logcurp |      Coef.   Std. Err.      t    P>|t|     [95% Conf.
Interval]
-------------
+----------------------------------------------------------------
      months |  -.0115651   .0035004    -3.30   0.003    -.0187604
-.0043699
      rating |   .3365299   .1484679     2.27   0.032
.0313498     .64171
```

```
        perl |   .0127223   .0054476     2.34   0.028
.0015245    .0239201
       multi |   .1717305   .2017743     0.85   0.402
-.2430225    .5864834
       _cons |   1.067117   .6862346     1.56   0.132     -.343458
2.477693
------------------------------------------------------------------------
--------


. 
. //functional form
. gen logmonths = log(months)
(968 missing values generated)

. regress logcurp logmonths months rating platforms multi perl

      Source |       SS           df       MS      Number of obs   =
31
-------------+----------------------------------   F(6, 24)        =
6.91
       Model |  7.40231921         6  1.23371987   Prob > F        =
0.0002
    Residual |  4.28700629        24  .178625262   R-squared       =
0.6333
-------------+----------------------------------   Adj R-squared   =
0.5416
       Total |  11.6893255        30  .389644183   Root MSE
=    .42264

------------------------------------------------------------------------
--------
     logcurp |      Coef.   Std. Err.      t    P>|t|     [95% Conf.
Interval]
-------------
+----------------------------------------------------------------
   logmonths |  -.9411859   .3140935    -3.00   0.006    -1.589443
-.2929288
      months |    .016448   .0097574     1.69   0.105
-.0036903    .0365862
      rating |   .3926837   .1362746     2.88   0.008
.1114267    .6739406
   platforms |  -.0597641   .0630657    -0.95   0.353
-.1899253    .0703972
       multi |    .186747   .1819448     1.03   0.315
-.1887687    .5622627
        perl |   .0093368   .0049348     1.89   0.071
-.0008482    .0195218
       _cons |   3.368074   .9749781     3.45   0.002     1.355818
5.38033
------------------------------------------------------------------------
```

```
--------

.
. //heterosked.
. regress logcurp months rating perl platforms multi

      Source |       SS           df       MS      Number of obs   =
31
-------------+----------------------------------   F(5, 25)        =
4.92
       Model |  5.79842474         5  1.15968495   Prob > F        =
0.0028
    Residual |  5.89090076        25   .23563603   R-squared       =
0.4960
-------------+----------------------------------   Adj R-squared   =
0.3953
       Total |  11.6893255        30  .389644183   Root MSE
=    .48542

------------------------------------------------------------------------------
--------
     logcurp |      Coef.   Std. Err.      t    P>|t|     [95% Conf.
Interval]
-------------
+----------------------------------------------------------------
      months |  -.0112459    .003594    -3.13   0.004    -.0186478
-.003844
      rating |   .3185373   .1539162     2.07   0.049
.001541    .6355336
        perl |   .0126656   .0055224     2.29   0.030
.001292    .0240392
   platforms |   -.040076   .0720399    -0.56   0.583
-.1884449    .1082929
       multi |   .1492098   .2084766     0.72   0.481
-.2801559    .5785754
       _cons |   1.255263   .7734017     1.62   0.117    -.3375876
2.848114
------------------------------------------------------------------------------
--------

. predict resid_amt, resid
(968 missing values generated)

. scatter resid_amt months

. scatter resid_amt rating

. scatter resid_amt perl

. scatter resid_amt platforms
```

```
. scatter resid_amt multi

.
.
. estat hettest, rhs

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: months rating perl platforms multi

         chi2(5)      =     6.09
         Prob > chi2  =   0.2975

. //which has a high t-score?
. //generate the scatter plot
.
. //multicoliniearity
. regress logcurp months rating perl platforms multi

      Source |       SS           df       MS      Number of obs   =
31
-------------+----------------------------------   F(5, 25)        =
4.92
       Model |  5.79842474         5  1.15968495   Prob > F        =
0.0028
    Residual |  5.89090076        25   .23563603   R-squared       =
0.4960
-------------+----------------------------------   Adj R-squared   =
0.3953
       Total |  11.6893255        30  .389644183   Root MSE
=    .48542

------------------------------------------------------------------------------
-------
     logcurp |      Coef.   Std. Err.      t    P>|t|     [95% Conf.
Interval]
-------------
+----------------------------------------------------------------
      months |  -.0112459    .003594    -3.13   0.004    -.0186478
-.003844
      rating |   .3185373   .1539162     2.07   0.049
.001541    .6355336
        perl |   .0126656   .0055224     2.29   0.030
.001292    .0240392
   platforms |   -.040076   .0720399    -0.56   0.583
-.1884449    .1082929
       multi |   .1492098   .2084766     0.72   0.481
-.2801559    .5785754
       _cons |   1.255263   .7734017     1.62   0.117    -.3375876
```

```
2.848114
------------------------------------------------------------------------------
--------

. estat vif

    Variable |       VIF       1/VIF
-------------+----------------------
      rating |      1.32    0.759878
        perl |      1.20    0.833551
      months |      1.11    0.898161
       multi |      1.09    0.913421
   platforms |      1.09    0.913980
-------------+----------------------
    Mean VIF |      1.16

.
. //no serial correlation
.
. //for fun
. regress logcurp logmonths months rating perl  multi

      Source |       SS           df       MS      Number of obs   =
31
-------------+----------------------------------   F(5, 25)        =
8.14
       Model |  7.24190732         5  1.44838146   Prob > F        =
0.0001
    Residual |  4.44741818        25  .177896727   R-squared       =
0.6195
-------------+----------------------------------   Adj R-squared   =
0.5434
       Total |  11.6893255        30  .389644183   Root MSE
=    .42178

------------------------------------------------------------------------------
--------
     logcurp |      Coef.   Std. Err.      t    P>|t|     [95% Conf.
Interval]
-------------
+------------------------------------------------------------------
   logmonths |   -.910176   .3117466    -2.92   0.007     -1.55223
-.2681219
      months |   .0150646   .0096279     1.56   0.130
-.0047644    .0348936
      rating |   .4167813   .1336077     3.12   0.005
.141611    .6919516
        perl |   .0095301   .0049205     1.94   0.064
-.000604    .0196641
       multi |   .2187301   .1784222     1.23   0.232
```

```
-.1487373    .5861976
       _cons |   3.020932   .9016996     3.35   0.003     1.163847
4.878017
------------------------------------------------------------------------
--------

.
. log close
      name:  <unnamed>
       log:  /Users/maximiannecastaneda/Desktop/Econometrics Final
Paper/Data Set/fi
> nal.txt
  log type:  text
 closed on:   5 May 2020, 15:12:06
------------------------------------------------------------------------
--------------
```