```
(base) youli@MacFishBook-Pro FQ_2023 % python3 linear.py
                            OLS Regression Results
==============================================================================
Dep. Variable:          FlairPolarity   R-squared:                       0.021
Model:                            OLS   Adj. R-squared:                  0.004
Method:                 Least Squares   F-statistic:                     1.278
Date:                Sun, 19 Nov 2023   Prob (F-statistic):              0.260
Time:                        11:58:02   Log-Likelihood:                -328.70
No. Observations:                 435   AIC:                             673.4
Df Residuals:                     427   BIC:                             706.0
Df Model:                           7
Covariance Type:            nonrobust
================================================================================
                   coef    std err          t      P>|t|      [0.025      0.975]
--------------------------------------------------------------------------------
const            1.2668      1.801      0.704      0.482      -2.272       4.806
case number     -0.0003      0.000     -0.711      0.478      -0.001       0.001
death number     0.0036      0.014      0.252      0.801      -0.025       0.032
length        1.054e-05   1.02e-05      1.037      0.300   -9.44e-06    3.05e-05
Week_Number_1    -0.2062      0.124     -1.660      0.098      -0.450       0.038
Week_Number_2     0.0062      0.003      1.973      0.049     2.3e-05       0.012
Week_Number_3 -7.379e-05   3.41e-05     -2.162      0.031      -0.000   -6.71e-06
Week_Number_4  2.995e-07   1.32e-07      2.271      0.024    4.03e-08    5.59e-07
==============================================================================
Omnibus:                      248.945   Durbin-Watson:                   2.017
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             1127.867
Skew:                           2.702   Prob(JB):                    1.22e-245
Kurtosis:                       8.747   Cond. No.                     1.80e+09
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
[2] The condition number is large, 1.8e+09. This might indicate that there are
strong multicollinearity or other numerical problems.
```

```
(base) youli@MacFishBook-Pro FQ_2023 % python3 linear.py
                            OLS Regression Results
==============================================================================
Dep. Variable:          FlairPolarity   R-squared:                       0.175
Model:                            OLS   Adj. R-squared:                  0.167
Method:                 Least Squares   F-statistic:                     21.91
Date:                Sun, 19 Nov 2023   Prob (F-statistic):           2.20e-44
Time:                        12:07:42   Log-Likelihood:                -554.81
No. Observations:                1256   AIC:                             1136.
Df Residuals:                    1243   BIC:                             1202.
Df Model:                          12
Covariance Type:            nonrobust
==============================================================================
                     coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------
const              -0.9680      1.101     -0.879      0.380      -3.128       1.192
case number     -8.324e-06   9.31e-06     -0.894      0.372   -2.66e-05    9.95e-06
death number        0.0018      0.001      2.425      0.015       0.000       0.003
length           3.432e-05   4.41e-06      7.776      0.000    2.57e-05     4.3e-05
Type_Prison         0.6884      0.660      1.043      0.297      -0.606       1.983
Level_Federal       0.2896      0.665      0.435      0.663      -1.016       1.595
Level_State        -0.5351      0.655     -0.817      0.414      -1.820       0.750
Type_case number   -0.0003      0.000     -1.284      0.199      -0.001       0.000
Type_death number  -0.0031      0.008     -0.378      0.705      -0.019       0.013
Week_Number_1      -0.0389      0.068     -0.574      0.566      -0.172       0.094
Week_Number_2       0.0015      0.002      0.987      0.324      -0.001       0.005
Week_Number_3   -1.982e-05   1.51e-05     -1.310      0.191   -4.95e-05    9.87e-06
Week_Number_4    8.405e-08   5.47e-08      1.538      0.124   -2.32e-08    1.91e-07
==============================================================================
Omnibus:                      867.881   Durbin-Watson:                   1.663
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             9590.703
Skew:                           3.202   Prob(JB):                         0.00
Kurtosis:                      14.927   Cond. No.                     5.05e+09
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
[2] The condition number is large, 5.05e+09. This might indicate that there are
strong multicollinearity or other numerical problems.
```

```
(base) youli@MacFishBook-Pro FQ_2023 % python3 linear.py
                            OLS Regression Results
==============================================================================
Dep. Variable:          FlairPolarity   R-squared:                       0.179
Model:                            OLS   Adj. R-squared:                  0.171
Method:                 Least Squares   F-statistic:                     20.88
Date:                Sun, 19 Nov 2023   Prob (F-statistic):           3.23e-45
Time:                        15:37:56   Log-Likelihood:                -551.13
No. Observations:                1256   AIC:                             1130.
Df Residuals:                    1242   BIC:                             1202.
Df Model:                          13
Covariance Type:            nonrobust
==============================================================================
                         coef    std err          t      P>|t|      [0.025      0.975]
------------------------------------------------------------------------------
const                 -0.9377      1.098     -0.854      0.393      -3.093       1.217
case number       -9.183e-06    9.3e-06     -0.988      0.323   -2.74e-05    9.06e-06
death number          0.0016      0.001      2.089      0.037    9.66e-05       0.003
length             4.428e-05   5.74e-06      7.710      0.000     3.3e-05    5.55e-05
Type_Prison           0.4808      0.663      0.726      0.468      -0.819       1.781
Level_Federal         0.5807      0.672      0.864      0.388      -0.738       1.900
Level_State          -0.2565      0.661     -0.388      0.698      -1.554       1.041
Type_case number     -0.0003      0.000     -1.436      0.151      -0.001       0.000
Type_death number    -0.0014      0.008     -0.169      0.866      -0.018       0.015
Type_length       -2.415e-05   8.94e-06     -2.701      0.007   -4.17e-05   -6.61e-06
Week_Number_1        -0.0418      0.067     -0.620      0.535      -0.174       0.091
Week_Number_2         0.0016      0.002      1.027      0.304      -0.001       0.005
Week_Number_3     -2.027e-05   1.51e-05     -1.343      0.180   -4.99e-05    9.35e-06
Week_Number_4      8.528e-08   5.45e-08      1.564      0.118   -2.17e-08    1.92e-07
==============================================================================
Omnibus:                      879.034   Durbin-Watson:                   1.663
Prob(Omnibus):                  0.000   Jarque-Bera (JB):             9876.018
Skew:                           3.253   Prob(JB):                         0.00
Kurtosis:                      15.099   Cond. No.                     5.09e+09
==============================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
[2] The condition number is large, 5.09e+09. This might indicate that there are
strong multicollinearity or other numerical problems.
```