

```
In [22]: runfile('C:/Users/claire.loupias/Desktop/exercice-4.2.py', wdir='C:/Users/claire.loupias/Desktop')
```

OLS Regression Results

```
=====
Dep. Variable:          logged_price    R-squared:                0.588
Model:                  OLS            Adj. R-squared:           0.579
Method:                 Least Squares  F-statistic:              60.73
Date:                   Wed, 01 Apr 2020 Prob (F-statistic):       4.17e-17
Time:                   16:12:24       Log-Likelihood:           19.592
No. Observations:      88             AIC:                     -33.18
Df Residuals:          85             BIC:                     -25.75
Df Model:               2
Covariance Type:      nonrobust
=====
```

```
=====
              coef    std err          t      P>|t|      [0.025    0.975]
-----
Intercept    4.7660      0.097    49.112    0.000     4.573     4.959
sqrft        0.0004     4.32e-05    8.781    0.000     0.000     0.000
bdrms        0.0289      0.030     0.974    0.333    -0.030     0.088
=====
```

```
Omnibus:            11.244    Durbin-Watson:           1.807
Prob(Omnibus):      0.004    Jarque-Bera (JB):        24.634
Skew:               -0.332    Prob(JB):                 4.47e-06
Kurtosis:           5.506    Cond. No.                 9.85e+03
=====
```

Warnings:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

[2] The condition number is large, 9.85e+03. This might indicate that there are strong multicollinearity or other numerical problems.

La valeur estimée pour θ est 0.0858013666317267

OLS Regression Results

```
=====
Dep. Variable:          logged_price    R-squared:                0.588
Model:                  OLS            Adj. R-squared:           0.579
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Df Model:               2
Covariance Type:      nonrobust
=====
```

```
=====
              coef    std err          t      P>|t|      [0.025    0.975]
-----
Intercept    4.7660      0.097    49.112    0.000     4.573     4.959
sqrft_minus_150_bdrms 0.0004     4.32e-05    8.781    0.000     0.000     0.000
bdrms        0.0858      0.027     3.205    0.002     0.033     0.139
=====
```

```
Omnibus:            11.244    Durbin-Watson:           1.807
```

Prob(Omnibus):	0.004	Jarque-Bera (JB):	24.634
Skew:	-0.332	Prob(JB):	4.47e-06
Kurtosis:	5.506	Cond. No.	7.40e+03

=====

Warnings:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

[2] The condition number is large, 7.4e+03. This might indicate that there are strong multicollinearity or other numerical problems.

In [23]: