

Python 3.7.4 (default, Aug 9 2019, 18:34:13) [MSC v.1915 64 bit (AMD64)]
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IPython 7.8.0 -- An enhanced Interactive Python.

```
In [1]: runfile('C:/Users/claire.loupias/Desktop/exercice-3.1.py', wdir='C:/Users/claire.loupias/Desktop')
```

La corrélation entre cigs et faminc est : -0.17304492573586455

OLS Regression Results

```
=====
Dep. Variable:          bwght      R-squared:                0.030
Model:                  OLS        Adj. R-squared:           0.028
Method:                 Least Squares  F-statistic:              21.27
Date:                   Wed, 11 Mar 2020  Prob (F-statistic):       7.94e-10
Time:                   15:14:16      Log-Likelihood:           -6130.4
No. Observations:      1388          AIC:                      1.227e+04
Df Residuals:          1385          BIC:                      1.228e+04
Df Model:               2
Covariance Type:       nonrobust
=====
```

	coef	std err	t	P> t	[0.025	0.975]
Intercept	116.9741	1.049	111.512	0.000	114.916	119.032
cigs	-0.4634	0.092	-5.060	0.000	-0.643	-0.284
faminc	0.0928	0.029	3.178	0.002	0.036	0.150

```
=====
Omnibus:                116.751      Durbin-Watson:            1.922
Prob(Omnibus):          0.000      Jarque-Bera (JB):         619.781
Skew:                   -0.154      Prob(JB):                 2.61e-135
Kurtosis:                6.259      Cond. No.                 67.4
=====
```

Warnings:

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

OLS Regression Results

```
=====
Dep. Variable:          bwght      R-squared:                0.023
Model:                  OLS        Adj. R-squared:           0.022
Method:                 Least Squares  F-statistic:              32.24
Date:                   Wed, 11 Mar 2020  Prob (F-statistic):       1.66e-08
Time:                   15:14:16      Log-Likelihood:           -6135.5
No. Observations:      1388          AIC:                      1.227e+04
Df Residuals:          1386          BIC:                      1.229e+04
Df Model:               1
Covariance Type:       nonrobust
=====
```

	coef	std err	t	P> t	[0.025	0.975]
Intercept	119.7719	0.572	209.267	0.000	118.649	120.895
cigs	-0.5138	0.090	-5.678	0.000	-0.691	-0.336

```
=====
Omnibus:                118.187      Durbin-Watson:            1.924
Prob(Omnibus):          0.000      Jarque-Bera (JB):         635.742
Skew:                   -0.156      Prob(JB):                 8.92e-139
Kurtosis:                6.301      Cond. No.                 6.72
=====
```

Warnings:

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

In [2]: