```
cigtax cigprice
                              bwght fatheduc \
   faminc
count 1388.000000 1388.000000 1388.000000 1388.000000 1192.000000
      29.026657 19.552954 130.559006 118.699568
                                                   13.186242
mean
std
     18.739285
               7.795598 10.244485 20.353964
                                                2.745985
                2.000000 103.800003 23.000000
min
      0.500000
                                                1.000000
25%
      14.500000 15.000000 122.800003 107.000000
                                                  12.000000
50%
      27.500000 20.000000 130.800003 120.000000
                                                  12.000000
75%
      37.500000 26.000000 137.000000 132.000000
                                                  16.000000
      65.000000 38.000000 152.500000 271.000000 18.000000
max
    motheduc
                                 white
                parity
                         male
                                          cigs \
```

count 1387.000000 1388.000000 1388.000000 1388.000000 1388.000000 1.632565 0.520893 0.784582 12.935833 2.087176 mean std 2.376728 0.894027 0.499743 0.411260 5.972688 min 2.000000 1.000000 0.000000 0.000000 0.000000 25% 12.000000 1.000000 0.000000 1.000000 0.000000 50% 12.000000 1.000000 1.000000 1.000000 0.000000 75% 14.000000 2.000000 1.000000 1.000000 0.000000 max 18.000000 6.000000 1.000000 1.000000 50.000000

packs lbwght bwghtlbs Ifaminc count 1388.000000 1388.000000 1388.000000 1388.000000 4.760031 7.418723 0.104359 3.071271 mean 1.272123 0.298634 std 0.190662 0.918065 min 3.135494 1.437500 0.000000 -0.693147 25% 4.672829 6.687500 0.000000 2.674149 50% 4.787492 7.500000 0.000000 3.314186 75% 4.882802 8.250000 0.000000 3.624341 5.602119 16.937500 2.500000 4.174387 max

#Wooldridge Computer Exercise C1.2

Question i

Number of women in the sample: 665

The number of women that smokes during pregnancy is 212

Question ii

The average number of cigarettes smoked per day is about 2.09

This average is not a good measure of the "typical" woman because there are some women in the data that don't smoke at all,

yet their average cigarettes smoked per day got counted higher than 0. Also, there could be other variables, such as women's

level of education and income, that haven't been considered together with the average cigarettes per day. Therefore,

we have to consider more things when we're analyzing data for a typical woman.

Question iii

Among women who smoked during pregnancy, the average number of cigarettes smoked per day is 13.67

Question iv

Average of "fatheduc" in the sample is 13.186241610738255

Only 1,192 observations used to compute this average because some data could be missing. Question v

The average family income in dollars is \$29.026657

The standard deviation of family income in dollars is \$18.739285

Question vi

The difference in average birthweight between smoking mothers and non-smoking mothers is about -8.91

Question vii

Correlation between bwght and family income is 0.11

Correlation between bwght and mother's education 0.07

Correlation between bwght and number of cigarettes smoked per day is -0.15

Highest in magnitude is the correlation between bwght and number of cigarettes smoked per day.

The signs of the correlation do make sense.

Since the correlation between bwght and number of cigarettes smoked per day has a negative sign, it

indicates that cigarettes smoked per dayassociates with lower birth weight.

Although education and income have a postive sign with birth weight, they have little to none association

with birth weight since the correlation number is close to 0.

Question viii

Correlation between faminc and bwght in ounces is 0.10893684257363548

Correlation between faminc and bwght in pounds is 0.10893684257363548

Covariance between bwght and faminc is, 41.55055226693318

Covariance between bwghtlbs and faminc is, 2.596909516683324

Covariance between bwght_ounces and faminc is, 41.55055226693318

The correlation values don't change, but the covariance value does change based on the information we found.