```
                                              __   ___  ___  ___  ___(R)
                                             /_   /   /__/  /   /__/
                                           __/  /   /__/  /   /__/
                                              Statistics/Data Analysis
```

```
    --------------------------------------------------------------------------------
  > --------------------------------------------------------
        name:  <unnamed>
         log:  F:\ShaziLapTop\Desktop\STATA 16\STATA 16 MP Full Portable Version\St
  > ata16\cocoa2.log
    log type:  text
   opened on:   1 Jan 2000, 00:00:06
```

```
 1 .
 2 . use "C:\Users\HP\Desktop\coding_challenge\Part 2\A\income.dta"

 3 .
 4 . use "C:\Users\HP\Desktop\coding_challenge\Part 2\A\farmer_ind.dta"

 5 .
 6 . *Merging Data

 7 .
 8 . merge m:1 farmer_id using "C:\Users\HP\Desktop\coding_challenge\Part 2\A\income
   > .dta"

       Result                        # of obs.
       -----------------------------------------
       not matched                           0
       matched                           2,800  (_merge==3)
       -----------------------------------------

 9 .
10 . drop _merge

11 .
12 . merge m:1 crop_id using "C:\Users\HP\Desktop\coding_challenge\Part 2\A\mkt_pric
   > es.dta", force

       Result                        # of obs.
       -----------------------------------------
       not matched                         350
           from master                     350  (_merge==1)
           from using                        0  (_merge==2)

       matched                           2,450  (_merge==3)
       -----------------------------------------

13 .
14 . drop _merge

15 .
16 . *Checking if growing cocoa is profitable

17 .
18 . bys farmer_id: egen total_acre = sum(plotsize)
```

```
19 .
20 . describe

   Contains data from C:\Users\HP\Desktop\coding_challenge\Part 2\A\farmer_ind.dta
     obs:          2,800
    vars:              8                          29 May 2015 13:40
   --------------------------------------------------------------------------------
   > --------------------------------------------------------
               storage   display   value
   variable name   type   format   label       variable label
   --------------------------------------------------------------------------------
   > --------------------------------------------------------
   farmer_id       float   %9.0g                Farmer ID
   crop_id         float   %9.0g                Crop ID
   crop_name       str9    %9s                  Crop name
   sale_amt        float   %9.0g                Number of units of crop sold
   plotsize        float   %9.0g                Size of plot allocated to crop
   income          float   %9.0g                Income (by farmer)
   mkt_price       float   %9.0g
   total_acre      float   %9.0g
   --------------------------------------------------------------------------------
   > --------------------------------------------------------
   Sorted by: farmer_id
       Note: Dataset has changed since last saved.

21 .
22 . corr income sale_amt
   (obs=2,800)

                |   income sale_amt
   -------------+------------------
        income |   1.0000
      sale_amt |   0.2309   1.0000


23 .
24 . corr income sale_amt if crop_name == "cocoa"
   (obs=350)

                |   income sale_amt
   -------------+------------------
        income |   1.0000
      sale_amt |   0.1765   1.0000


25 .
26 . pwcorr income sale_amt, star(0.05)sig

                |   income sale_amt
   -------------+------------------
        income |   1.0000
               |
               |
      sale_amt |   0.2309*  1.0000
               |   0.0000
               |
```

```
27 .
28 . pwcorr income sale_amt if crop_name == "cocoa", star(0.05)sig

                  |   income sale_amt
     -------------+------------------
           income |   1.0000
                  |
                  |
         sale_amt |   0.1765*  1.0000
                  |   0.0009
                  |

29 . mvdecode sale_amt, mv(-99)
         sale_amt: 517 missing values generated

30 . describe

     Contains data from C:\Users\HP\Desktop\coding_challenge\Part 2\A\farmer_ind.dta
       obs:          2,800
      vars:              8                          29 May 2015 13:40
     -------------------------------------------------------------------------------
     > ---------------------------------------------------------
                  storage   display    value
     variable name   type    format    label     variable label
     -------------------------------------------------------------------------------
     > ---------------------------------------------------------
     farmer_id        float   %9.0g               Farmer ID
     crop_id          float   %9.0g               Crop ID
     crop_name        str9    %9s                 Crop name
     sale_amt         float   %9.0g               Number of units of crop sold
     plotsize         float   %9.0g               Size of plot allocated to crop
     income           float   %9.0g               Income (by farmer)
     mkt_price        float   %9.0g
     total_acre       float   %9.0g
     -------------------------------------------------------------------------------
     > ---------------------------------------------------------
     Sorted by: farmer_id
         Note: Dataset has changed since last saved.

31 .
32 . gen revenue = mkt_price* sale_amt
   (788 missing values generated)

33 . gen revsquash = income - revenue
   (788 missing values generated)

34 . gen price = revsquash/ sale_amt
   (916 missing values generated)

35 . drop revsquash

36 . drop price

37 . log close
         name:  <unnamed>
          log:  F:\ShaziLapTop\Desktop\STATA 16\STATA 16 MP Full Portable Version\St
   > ata16\cocoa2.log
     log type:  text
     closed on:   1 Jan 2000, 00:04:51
     -------------------------------------------------------------------------------
     > ---------------------------------------------------------
```