Programmer Instruction for Computer Assignment 1

1. Input the 18 observations consisting of the two variables: one dependent variable, income ($1000), and two independent variables, age (yrs) and order (referred to below as I, A, and O respectively).
2. Get the univariate descriptive statistics including mean, std.dev., min, max, and a histogram for each of these three variables.
3. Get scatterplots of all pairs of these variables (3 plots in total). Display I on the y-axis when I is included. If there is an O variable, display it on the x-axis when included. Specifically plot (using the notation “y” vs “x”): I vs A, I vs O, A vs O. Adjust the min and max on the x and y axes to remove blank areas from each of plots.
4. Get the correlation matrix for these three variables.
5. Fit the first order regression model E(I)=β0+β1A plus the residual plot and the histogram of the residuals.
6. Repeat step 5 for the 2nd order regression model: E(I)=β0+β1A+β2A2.
7. Save this material. Further output maybe requested based on these materials.

Comment from the professor :

These instructions seem fine.  These are (Initial) Programmer's Instructions so we would not include order in steps 5 and 6. Read page 3 starting with the FAQ.  -ths