Programmer Instruction for Computer Assignment 2

1.     We were given 25 observations. However, observation 14 has a missing entry, so we are excluding the entire observation. Input the remaining 24 observations consisting of the two variables: one dependent variable, profit ($100), and two independent variables, material A(gallons), material B (lbs), and order(referred to below as P, A, B, and O respectively).

2.    Get the univariate descriptive statistics including mean, std.dev., min, max, and a histogram for each of these four variables.

3.    Get scatterplots of all pairs of these variables (6 plots in total). Display P on the y-axis when Pis included. If there is an O variable, display it on the x-axis when included. Specifically plot (using the notation “y” vs “x”): P vs A, P vs B, P vs O, A vs B, A vs O, and B 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 four variables.

5.     Fit the first order regression model E(I)=b0+b1A+b2B plus the residual plot and the histogram of the residuals.

6.    Repeat step 5 for the 2nd order regression model: E(I)=b0+b1A+b2B+b3A2+b4B2.

7.     Save this material. Further output maybe requested based on these materials.

Comment：

Looks good except in steps 5 and 6 replace I with P in E()

Revised Programmer Instruction for Computer Assignment 2:

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4.    Get the correlation matrix for these four variables.

5.     Fit the first order regression model E(P)=b0+b1A+b2B plus the residual plot and the histogram of the residuals.

6.    Repeat step 5 for the 2nd order regression model: E(P)=b0+b1A+b2B+b3A2+b4B2.

7.     Save this material. Further output maybe requested based on these materials.