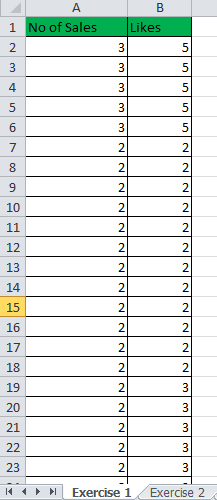
# Practical 4

## Inferential Statistics – Part II

From Excel, Open file “Practical 4.xls” and click on Exercise 1.



* 1. On the “Data” tab => Data Analysis as shown below. You will see a pop up window as shown in Figure 2. Click on “Regression”, then click OK.

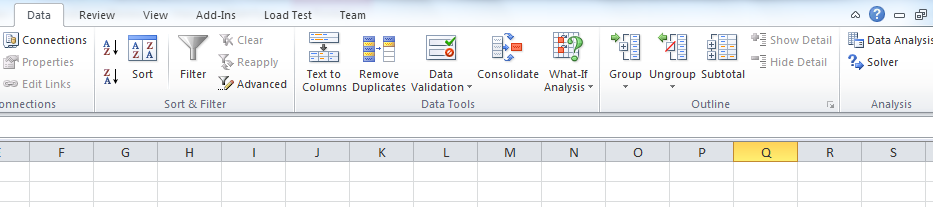


Figure 1

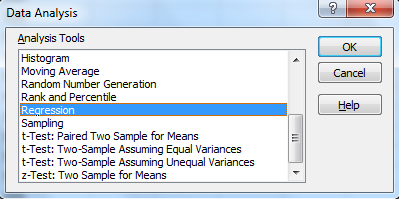


Figure 2

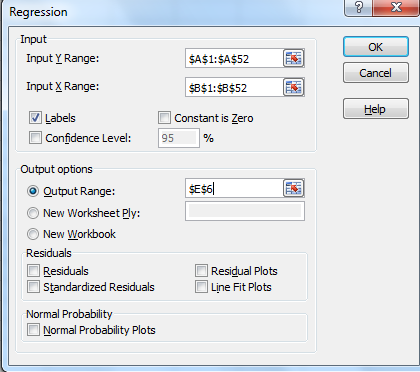


Figure 3

* 1. When you see a pop up window as shown in Figure 3, click on “Input Y range” and then on the excel table, click on the “No of Sales” cell, then press Ctrl+Shift+Arrow Down. For the “Input X range”, click on the “Likes” cell then press Ctrl+Shift+Arrow Down. Check on the “Labels” box and “Output Range” on an empty cell. Click on OK.
  2. Figure 4 shows the results of your regression. Examine the “Adjusted R Square”. Then examine the coefficients for Likes together with the p-value. Discuss the action for deployment based on the interpretation of the results.

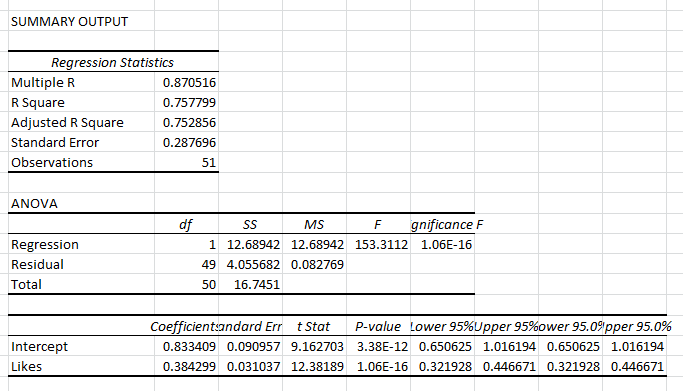
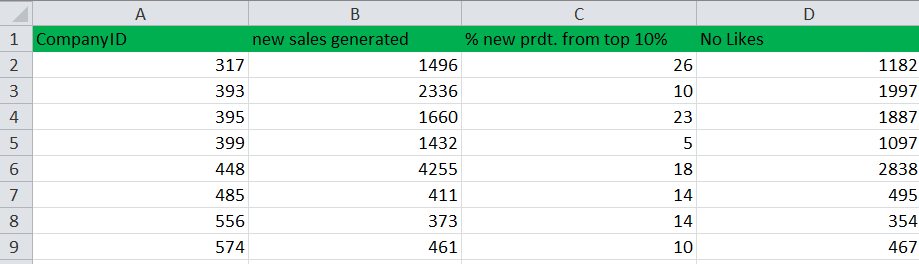


Figure 4

##### Exercise 2

Open the spreadsheet “Exercise 2” from the “Practical 4.xls” file. The following shows the new sales generated per month for each company; the “% new prdt. from top10%” is the percentage of new products that was ranked as the top 10% popular items on a monthly survey; the “No. Likes” is the total number of likes on each company’s facebook page for their products per month. Your task is to derive a predictive model and show if social media metrics has any statistical significant effect on the new sales.



**~~END~~**