

## Assignment : W7 - Multiple Linear Regression

**Detail :** Refer to the Excel file **Salary** (attached to the assignment) to address all the questions below:

1. Develop a model to predict the salary based on (Gender, Age, Performance Rating, and Degree).
2. State the multiple regression equation.
3. Interpret the meaning of the slopes in this equation.
4. Perform a residual analysis for the results and determine if the regression assumptions are valid.
5. Is there a significant relation between the salary and the independent variables at the 0.05 level.
6. Determine the p-value in (5) and interpret its meaning.
7. Interpret the meaning of the coefficient of multiple determination in this problem.
8. Determine the adjusted R-Squared
9. At the 0.05 level of significance, determine whether each independent variable makes a significant contribution to the regression model. Indicate the most appropriate regression model for this data set.
10. Determine the p-values in 9 (above) and interpret their meaning.