STAT 415/615 CLASSWORK MULTIPLE REGRESSION INTERACTION ANALYSIS

**WorkExperience LevelofEducation AnnualIncome($Thousands)**

21, 6, 31.7,

14, 3, 17.9,

4, 8, 22.7,

16, 8, 63.1,

12, 4, 33,

20, 4, 41.4,

25, 1, 20.7,

8, 3, 14.6,

24, 12, 97.3,

28, 9, 72.1,

4, 11, 49.1,

15, 4, 52,

For the Table given above:

1) Use and show R code to produce a full Multiple Regression Model. The response variable is Annual Income. Also produce the summary table

2) Use and show R code to produce a full Multiple Regression Model that includes and interaction term. Also produce the summary table

3) Using summary indicators from both models determine which model you would use to predict Annual Income. Justify your answer. Your analysis should have 6 to 7 sentences using and comparing significance of pvalues, R2, adusted R2, variable standard errors, residual standard errors and the overall significance of both models.