**Question 1**

Using the birthweight data, regression results that predict the birthweight using smoker and age are given below:

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1. Interpret the coefficients.
2. Predict a birthweight of child whose mother is a 30-year-old smoker.
3. Calculate and/or interpret the SER, RMSE, R-squared and Adjusted R-squared.
4. Generate three variables with pure random noise as given in the code, estimate the model in (1) with these three additional variables. Compare the R-squared and Adjusted R-squared from this regression to the one in (1). How do you explain the results?

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