

Assignment 9

Released: 11/18/2020

Due: 11/29/2020

Assignments are due on the due date, unless otherwise specified. Late submission will not be accepted. This is an individual assignment. Please ensure the guidelines for submissions are followed to receive full credit.

Please use the provided data to develop a logistic regression model to determine the factors that impact the low birth weight (variable low) of babies. The data dictionary is as follows:

| Variable | Description | Codes/Values | Variable Name |
|----------|---|---|---------------|
| 1 | Identification Code | ID Number | ID |
| 2 | Low Birth Weight | 1 if birthweight <2500g 0 if birth weight >2500g | low |
| 3 | Age of Mother | | age |
| 4 | Weight of Mother at last menstrual period | In Pounds | wgt |
| 5 | Race | 1 = white, 2= Black, 3 = other | race |
| 6 | Smoking status during pregnancy | 1= yes, 0 = no | smoke |
| 7 | History of premature labor | number of occurrences of prior premature labor | PTL |
| 8 | History of Hypertension | 1= yes, 0 = no | HT |
| 9 | Presence of Uterine irritability | 1= yes, 0 = no | UT |
| 10 | Number of Physician Visits During the First Trimester | | FTV |
| 11 | birth weight in grams | | BWT |

Please ensure your submission includes the following:

1. Summary Statistics for continuous and categorical variables
2. Your best logistic regression model output that includes both the coefficient estimates and the odds ratio
3. Interpretation of the coefficients
4. Stata code.
5. You do not have to turn in a formal report but at the minimum include everything in 1-4 above.

NOTE: Your final exam take home portion will include logistic regression estimation and this assignment is a great practice.

