


Baby Birth Weight

Assignment 2: Hypothesis Testing (T-Test)



A baby's weight is dependent on baby's gender AND on mother's color, marital or smoker status

- T-test results ran between **dependent** variable Weight and the following **independent boolean variables** confirm that we **reject the Null Hypothesis** -> $H_0: u_1 = u_2$
- We conclude that the **samples came from populations with unequal variances** (P value of Equality of Variance is $0.001\% < \text{Confidence Interval } 5\%$). **Thus, weight mean DOES vary depending on** the following variables:
 - ✓ Black
 - ✓ Married
 - ✓ MomSmoker
 - ✓ Boy
- The sample is normally distributed
- The relationship between Weight and bi-categorical independent variables CigsPerDay, MomWtGain, Visit, MomEdLevel must be evaluated using different statistical tests