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FLS-6183  
Métodos Quantitativos de Pesquisa II  
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Lab 1

Review of Hypothesis Tests  
Difference of means test vs. coefficient test in a bivariate regression model

Part I. Univariate Hypothesis Test Review

- 1) Please summarize the hypothesis test (univariate) on  $y$  as described in the lab? After running the hypothesis test, what can we conclude?

Part II. Bivariate Hypothesis Test Review

- 1) First, let's carry out a hypothesis test where the dependent variable,  $y$ , is a continuous variable ( $y$ ) which differs between two groups with a difference of means test. Please summarize the result of the difference of means hypothesis test on  $y$ ? After running the hypothesis test, is there a difference in the mean conditional on  $x$ ?
- 2) Next, let's carry out the same test using a bivariate regression model. Please summarize the result of the difference of means hypothesis test on  $y$ ? After running the hypothesis test, is there a difference in the mean conditional on  $x$ ?
- 3) Do you think there is a preferred method in this particular case for these type of data ( $y$ =continuous and  $x$ =dummy)?
- 4) Are there any advantages of using a regression in this case? Please explain.