

CIND 119

Introduction to Big Data Analytics

Lab 2

1. Download **mtcars.csv** from your D2L course shell, under Course Materials, in the “Lab CSV Files” folder. Complete the following tasks:
 - a. Read the file in SAS and display the contents using **import** and **print** procedures.
 - b. Test the hypothesis to check whether there is a significant difference between the means of the miles per gallon (mpg) for automatic transmission vehicles and manual transmission vehicles for significance level 0.05.
2. Download **sleep.csv** from your D2L course shell, under Course Materials, in the “Lab CSV Files” folder. It contains a random sample of college students reporting the number of hours of sleep they had last night. Complete the following tasks:
 - a. Based on this sample, find the 90% confidence interval for average sleeping time of college-age adults.
 - b. Test the hypothesis that the sample mean is equal to the 7 hours population mean (sleep time of college-age adults). Use a significance level of 0.1.

Please Note: CIND119 covers the z-test, used when $N > 30$. However, since there is no separate z-test procedure in SAS, we will use the t-test. The t-test is simply an approximation of z-test (for normal distribution) on smaller datasets, when $N < 30$.

End of CIND119 Lab 2

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