# This is a sample SPSS Output for T-Test for Difference in Means

# NOTE: We do extra work by discussing the findings after analysis in tables or visualization or after determining our output. Just as done in this work were we teach client how the result is interpreted, we do provide a discussion of the findings to lift extra work for client so that the result is ready-made for either research chapter 4 or for industrial or business use. Here, only a sample output is provided for the purpose of exemplification

**T-Test**

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How to Read this Output:

Note the mean for each of the two groups in the “Group Statistics” section. This output shows that the average weight for European cars is 2431 pounds, versus 2221 pounds for Japanese cars.

To see the results of the t-test for the difference in the two means, find the p-value for the test. The p-value is labeled as “Sig.” in the SPSS output (“Sig.” stands for significance level). To find the correct “Sig.”, look in the section of the “Independent Samples Test” output labeled “t-test for Equality of Means” and you will find a column labeled “Sig. (2-tailed).” This is the correct column, not the column labeled “Sig.” in the section of the “Levene’s Test for Equality of Variances” section. Finally, read the “Sig.” value in the second row, the row labeled “Equal variances not assumed”. We will use the second row since we almost never have any reason to think a *priori* that the amount of variation within each group will be the same (the p-value in the two rows is usually almost the same anyway). In the above example the p-value is .002, implying that the difference in means is statistically significant at the .1, .05. and .01 levels.

Summary: To find the p-value for the hypothesis test for the difference in means, look in the column labeled “Sig. (2-tailed)” in the “t-test for Equality of Means” section, and in the second row (labeled “Equal variances not assumed”).

Note that since the p-value given by SPSS is 2-tailed, you need to divide it in half for a 1-tailed test. In the above example the 1-tailed p-value would be .001. It is important to note also, that compusolvetechnologies@gmail.com do provide this kind of sample for the purpose of guiding clients