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#### Lab 11 Wrietup

1. For this part, all we need to do is run proc means to get the average for favwin, which would be the average winning percentage. We had a mean for favwin at .763, meaning that the average winning percentage was 76.31%.

2A. When we test this in SAS, we get an f-value of 7.43 with a low Pr value, implying that this test is significant in testing the intercept = 0.5

2B. We can test this in SAS and get a value of 1.82 with a low Pr value, however this test is not statistically significant.

2C. We re-run the regression with the rest of the values and do a joint significance test and receive the value of 1.18 with a high pr value of 31.49%. This means that there is some slight joint significance, but not a lot and is not considered statistically significant at all.

We run the LPM model and the predicted probability of winning is 73.64%.

3A. For our first test of testing the intercept equalling zero, we get a very low value with a high Pr value, which makes sense, as there is rarely ever going to be a regression we run in SAS with an intercept of a perfect zero.

3B. We get a high value for our next test and a low Pr value, implying that this test is statistically significant.

3C. When we do joint significance testing on the next regression, we get a value of 2.71 and a high Pr value of .4386. This is on the edge of what is considered statistically significant in a two tailed 95% confidence interval, so it is up to the analyst to therefore decide, but because of the Pr value, the argument can be made for both significant and non significant.

The final predicted probability of winning by the probit model is 79.49%, higher than our LPM model.