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**Subject: Project 0**

**Class: DSCI 512**

**Section: 01W**

**Instructor: Dr. Nengbing Tao**

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1. Read the dataset in titanic2.csv into R. Call the loaded data titanic. Make sure that you have the directory set to the correct location for the data.
2. How many rows are in the data frame? How many columns? What do the rows and columns represent?
3. Select the 1st, 5th, and 10th rows with columns Class and Age.
4. Regress Survived and Died on the predictors Class, Sex and Age using logistic regression with the two-column form for the dependent variables. Are any of the predictors associated with survival? If so, explain the relationship based on the t-statistics. Explain the chances of survival in terms of odds, giving the precise numbers and giving in terms a non-expert can understand.
5. What are the odds of a male 3rd-class child surviving the Titanic? Show the precise odds and explain in a way a non-expert can understand.
6. Show a histogram of the Chi-Square distribution with 8 (upper) and 13 (lower) degrees of freedom. In the graphic, draw a horizontal dotted line to show the critical test value (0.05 significance level). Make sure your graphic is properly titled and labeled.