Do not use the internet to answer the questions.

Please work on the tasks together in pairs.

Please use any tool you are comfortable with to answer these questions. This computer has Excel, R, Rstudio, Python (command-line), SAS JMP Pro 12, and MySQL Workbench. If you prefer to use another software we can download that as well. We will also provide paper and writing utensils.

**The total time for the study is approximately 60 mins. Please do not spend more than 45 mins on the tasks below.**

Task: For a to c, please describe the relationship between the categories. For d the factors should be ranked from the most significant to least significant. You can use mean, mode, etc. to explain the ranking.

**Using train.csv: (35 mins)**

1. What is the relationship between the gender (Sex), age, and the number of siblings/spouse traveling (SibSp)?
2. What is the relationship between the Title (you can find this in the name- Mr., Mrs., Ms., Miss., Master., Dr., etc. There may be more than this) and the number of children/parents (Parch) traveling?
3. What is the relationship between the fare, class (Pclass), and age?
4. Rank the factors for their contribution to survival. The factors should be ranked from the most significant to least significant. You can use any methods to explain the ranking. (1 = survived, 0 = died)

When you are comfortable with your answers to the tasks above or time is running out, please move on to the final task. Again, you must work together in pairs and you may not use the internet to answer the questions.

**Using test.csv and your results from the previous task: (10 min.)**

Predict whether the following passengers survived:

1. Chaffee, Mrs. Herbert Fuller (Carrie Constance Toogood)
2. Robins, Mr. Alexander A
3. Peltomaki, Mr. Nikolai Johannes
4. Abelseth, Mr. Olaus Jorgensen
5. Mulvihill, Miss. Bertha E
6. Thomas, Mr. John
7. Daniels, Miss. Sarah
8. Delalic, Mr. Redjo