

## CSCI 513.01W – Python Programming for AI

### Assignment #5

**Total Points:** 100

Answer the following questions based on the dataset called **titanic.csv**. This dataset describes the survival status of each passenger traveling the Titanic on 15<sup>th</sup> of April 1912. The dataset does not contain any information about the crew. Any missing data is represented using the ? symbol.

### Questions

For each question below, use Pandas and Python to write one or more instructions to compute the answer. Use one Notebook cell for each question. The only Pandas, and Python features that you can use in this assignment are the ones introduced in class.

1. How many rows do we have?
2. How many columns do we have?
3. Which columns are numeric in value?
4. How many people were traveling to New York city?
5. Which fare was bought the most?
6. What is the highest paid fare?
7. How many females survived the crash?
8. How many males survived the crash?
9. How many survivors purchased a 2<sup>nd</sup> class ticket?
10. Draw a pie plot to show the age count for the survivors.
11. Draw a bar plot of the count of people in each boat. Do not include in the plot the '?' value.

### What to hand in

Submit your program electronically through D2L. Please hand in your Jupyter notebook file (Python program: .ipynb)