Math 327 Chapter 9 Homework Assignment.

Insert your answers to the questions below into the attached R Markdown file, knit the R Markdown file, and submit the knitted report. Only the knitted report needs to be submitted.

Run the code chunks interactively, as needed, to obtain answers to these questions.

The variables are:

- PClass = Passenger Class (2=1st Class, 3=2nd Class, 4=3rd Class). 1st Class passengers paid the most money for their tickets and had the nicest accommodations.
- Age = Passenger age in years
- Sex = Gender; values are Male and Female. R will code Female as 0 and Male a 1
- Survived: 1=Survived, 0=Died

Since it is easier to interpret odds ratios for positive effects (slopes), the analyses model not surviving, using a derived variable, Died (1=Died, 0=Survived).

The questions are:

1. Report and interpret the odds ratio for the effect of Sex (gender) on not surviving.

2. Report and interpret the confidence interval for the odds ratio of Sex.

3. Report and interpret the odds ratio for the effect of Age on not surviving.

4. Report and interpret the confidence interval for the odds ratio of Age.

5. Report and interpret the odds ratio for the effect of PClass on not surviving.

6. Report and interpret the confidence interval for the odds ratios of PClass.

Note that PClass is a categorical variable with 3 levels. Thus, R will produce two coded variables that will compare 2nd class vs. 1st Class and 3rd Class vs. 1st Class. And there are two odds ratios to interpret.