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Part 2 of Assignment 3:

Exploratory Data Analysis for Titanic Database

1. Determine if the survival rate is associated to the class of passenger

Figure 1 shows the relation between survival rate and class of passenger as:

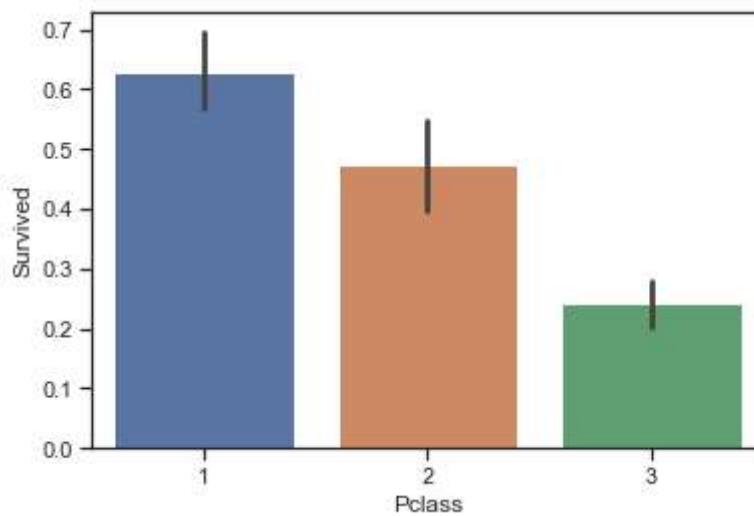


Figure 1: Survived versus Pclass

It is clear that these two variables are correlated to each other since we have much more survivals in passengers in class 1 and less survivals in passengers in class 2. Table 1 shows the exact percentage of survivals as well.

Table 1: Percentage data for survivals in each group

Pclass	Survived
1	62.96%
2	47.28%
3	24.24%

2. Determine if the survival rate is associated to the gender

The same analysis has been done for the other variables. Figure 2 shows the relation between survival rate and gender as:

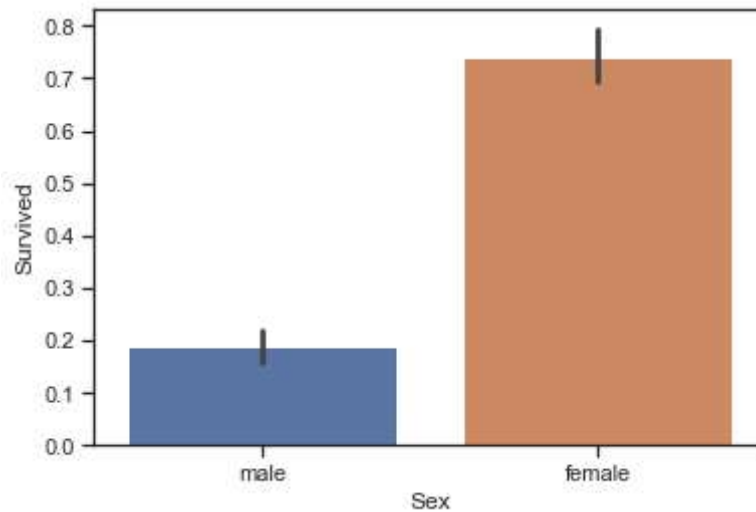


Figure 1: Survived versus Sex

It is clear that these two variables are also correlated to each other since we have much more survivals for female than male. Table 1 shows the exact percentage of survivals as well.

Table 2: Percentage data for female and male survivals

Gender	Survived
Female	74.2%
Male	18.89%

3. Determine the survival rate is associated to the age

Figure 3 shows the relation between survival rate and age groups as:

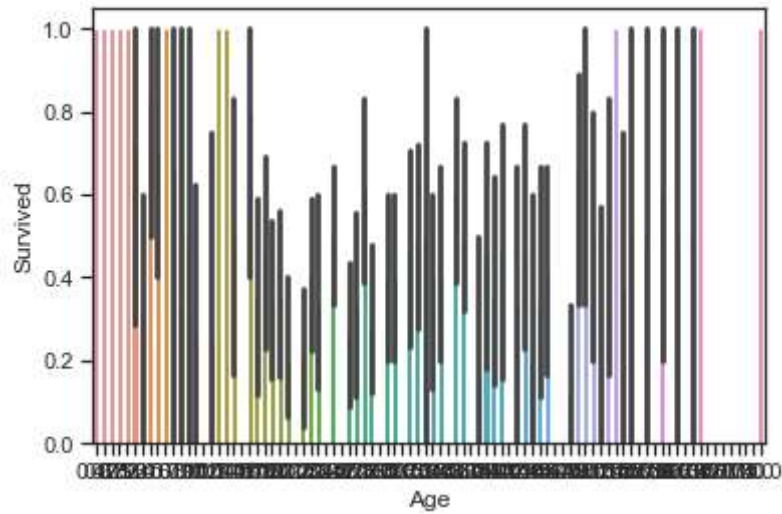


Figure 3: Survived versus Age

Also, we can categorize the passengers in two groups: Child (age < 10) and Adult (age >= 10). Figure 4 shows the results as:

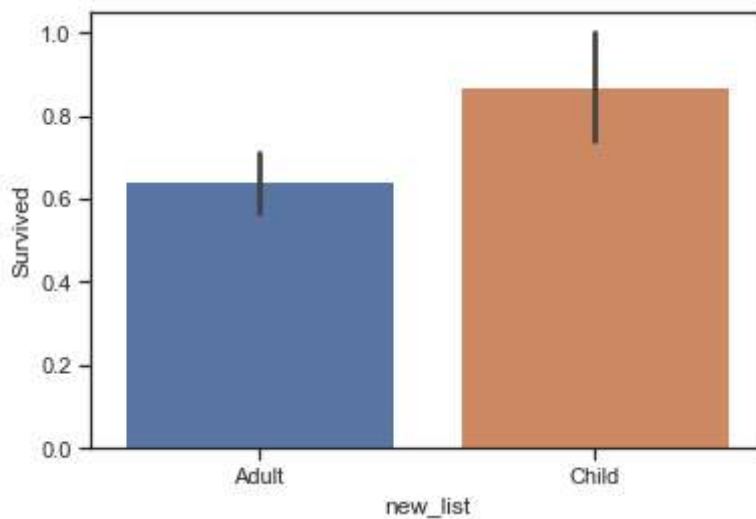


Figure 4: Survived versus Age Group

Also, It is clear that these two variables are also correlated to each other since we have more survivals for children than adults. Table 3 shows the exact percentage of survivals as well.

Table 3: Percentage data for age group survivals

Age Group	Survived
Child	59.03%
Adult	38.19%