

Titanic

This report is about analysis of Titanic dataset. There are 891 observations, with 12 variables in the dataset. We will analyze whether the class, gender and age are associated with the survival rate.

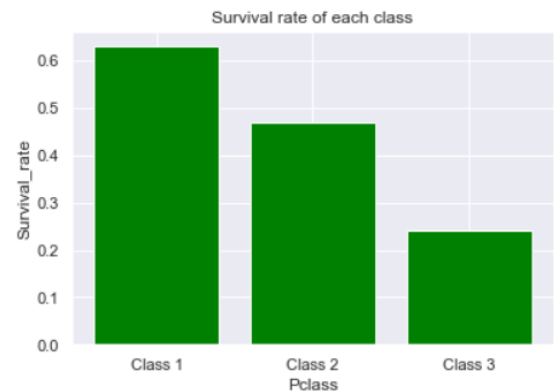
Pclass VS Survival rate

Below table shows the summary of no. of passengers, no. of survived passengers and the survival rate of each class.

	Count	No. of survived	Survival rate
Class 1	216	136	0.63
Class 2	184	87	0.47
Class 3	491	119	0.24

Table 1 – Summary of each class passengers

From the statistics showed, Class 1 has higher survival rate than Class 2 and Class 3. In Titanic, Class 1 is the upper class, Class 2 is middle class and Class 3 is low class.



Graph 2 – survival rate of each class

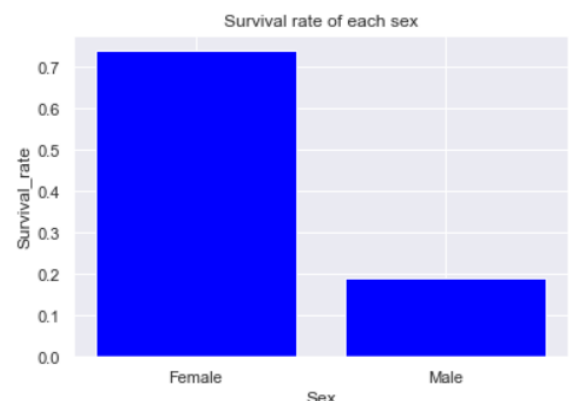
Sex VS Survival rate

Below table shows the summary of no. of passengers, no. of survived passengers and the survival rate of each class.

	Count	No. of survived	Survival rate
Female	314	233	0.74
Male	577	109	0.19

Table 3 – Summary of each class passengers

From the figures above, it shows that female has a higher survival rate than male. Graph 3 illustrates the survival rate of each sex.

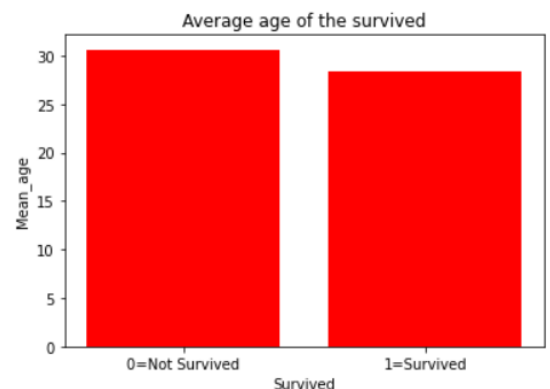


Graph 4 – survival rate of each sex

Age VS Survival rate

From the figures below, we can see that the average age of the survived and not survived does not have big difference (30.63 and 28.34) respectively.

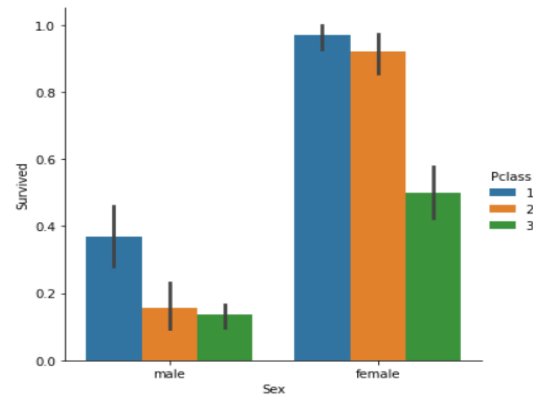
Therefore, based on the age information we cannot conclude the age has large association with the survival rate.



Graph 5 – survival rate of each sex

Conclusion

To conclude, the sex and Pclass have greater association with the survival rate while the age does not have much information to tell. (Figure 6 illustrates the Pclass and sex have greater association with the survival rate).



**Graph 6 – survival rate of
each sex and Pclass**