

## Problem Statement

**1) Import the Titanic Dataset from the following link:**

<https://drive.google.com/file/d/1JTJCjdGuUxzKXYlwOavwovB01k6FWg3r/view?ts=5b42ea10>

**Perform the below operations:**

**a. Is there any difference in fares by different class of tickets?**

**Note- show a boxplot displaying the distribution of fares by class**

**Answer :**

```
library(readr)
titanic <- read_csv("G:/DATA ANALYTICS/DATA/titanic3.csv")
str(titanic)

View(titanic)

boxplot(fare~pclass,data= titanic,
main="Fares Versus Pclass",xlab="Class",ylab="Fares",col=topo.colors(3))
```

**b. Is there any association with Passenger class and gender?**

**Note- show a stacked bar chart**

**Answer :**

```
counts<-table(titanic$sex,titanic$pclass)

barplot(counts, main = "Distribution of Class by gender", xlab="Pclass", col=c("blue", "red"),
legend = c("Female", "Male"), names.arg = c("Pclass1st", "Pclass2nd", "Pclass3rd"))

#another way --> chisq test for checking association

chisq.test(titanic$pclass ,titanic$sex)

#ho:there is no association
#since p value is 0.0002064<0.05
#we reject the null hypothesis and thus say there is association
```