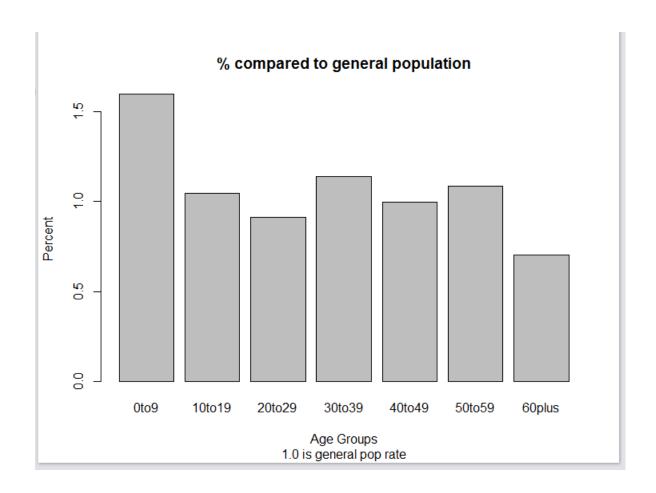
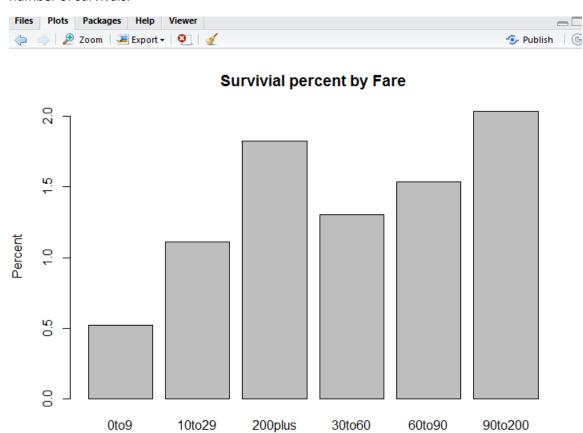
## **Titanic Submission**

This graph shows survival percentage of population according to the age group. From this visualization we can find out that children with age 0-9 were the once that had most percentage of survival.



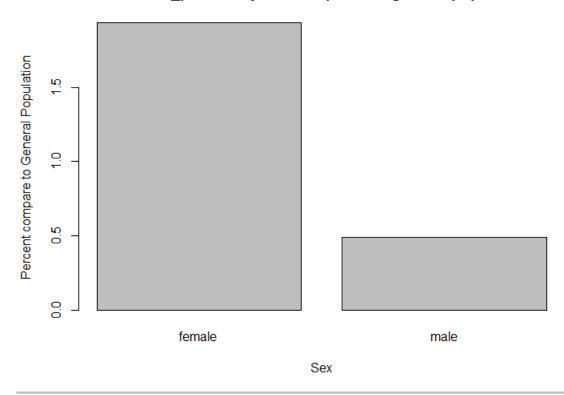
The following graph shows survival percent by fare. We have categorized different fare groups for the sake of this visualization. We can see that people who paid 90-200\$ and more than 200 had more number of survivals.



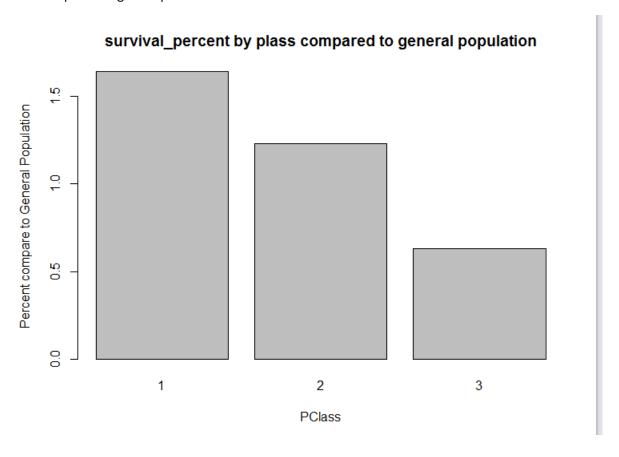
Fare Groups

This graph shows % comparison of survival of males and females. We can see that % survivals for females is more than males.

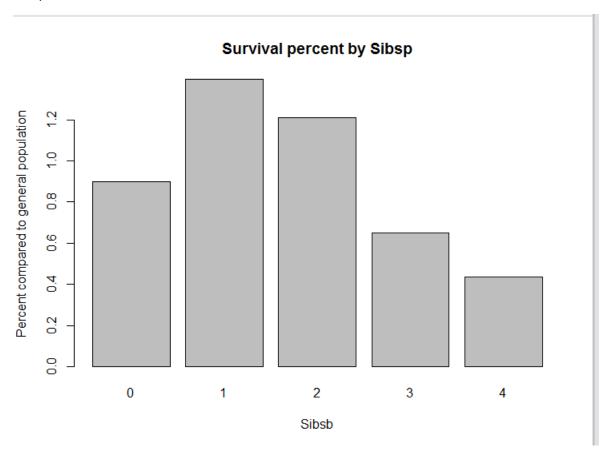
## survival\_percent by sex compared to general population



Following graph shows survival percent by pclass. We can see that people with Pclass 1 have more survival percentage compared to other classes.



This graph shows survival percent by sibsp. People with 1 sibling had more percentage of survival compared to others.



## Code

```
\label{eq:mymodel} mymodel = rpart(Survived ~ Pclass + Sex + Age + SibSp + Parch + Fare + Embarked, data=traindata, \\ method="class")
```

```
predictions = predict(mymodel, newdata = testdata, type="class")
submitcsv = data.frame(PassengerId = testdata$PassengerId, Survived = predictions)
write.csv(submitcsv, file = "ashwin_titanic_2.csv", row.names = FALSE)
```

barplot(rate\_surviving\_compared\_general\_rate, main = "% compared to general population",sub = "1.0 is general pop rate",xlab = "Age Groups", ylab = "Percent")

barplot(survival fare general, main = "Survivial percent by Fare", xlab = "Fare Groups", ylab = "Percent")

barplot(survive\_per\_sex\_comp\_to\_gen\_pop, main = "survival\_percent by sex compared to general population",xlab = "Sex",ylab = "Percent compare to General Population")

barplot(survive\_per\_Pclass\_comp\_to\_gen\_pop, main = "survival\_percent by plass compared to general population",xlab = "Pclass",ylab = "Percent compare to General Population")

barplot(Survive\_per\_Sibsp\_to\_gen\_pop, main = "Survival percent by Sibsp", xlab = "Sibsb",ylab = "Percent compared to general population")