C389008 김동혁 컴퓨터응용통계 과제 1

#3장 연습문제 8

```
Titanic
mytable <- Titanic[1:3, "Male", "Adult",]
CrossTable(mytable)
```

```
> CrossTable(mytable)


   Cell Contents
|-------------------------|
|                       N |
| Chi-square contribution |
|           N / Row Total |
|           N / Col Total |
|         N / Table Total |
|-------------------------|


Total Observations in Table:  805


             | Survived
       Class |        No |       Yes | Row Total |
-------------|-----------|-----------|-----------|
         1st |       118 |        57 |       175 |
             |     4.454 |    20.105 |           |
             |     0.674 |     0.326 |     0.217 |
             |     0.179 |     0.390 |           |
             |     0.147 |     0.071 |           |
-------------|-----------|-----------|-----------|
         2nd |       154 |        14 |       168 |
             |     1.972 |     8.902 |           |
             |     0.917 |     0.083 |     0.209 |
             |     0.234 |     0.096 |           |
             |     0.191 |     0.017 |           |
-------------|-----------|-----------|-----------|
         3rd |       387 |        75 |       462 |
             |     0.204 |     0.922 |           |
             |     0.838 |     0.162 |     0.574 |
             |     0.587 |     0.514 |           |
             |     0.481 |     0.093 |           |
-------------|-----------|-----------|-----------|
Column Total |       659 |       146 |       805 |
             |     0.819 |     0.181 |           |
-------------|-----------|-----------|-----------|
```

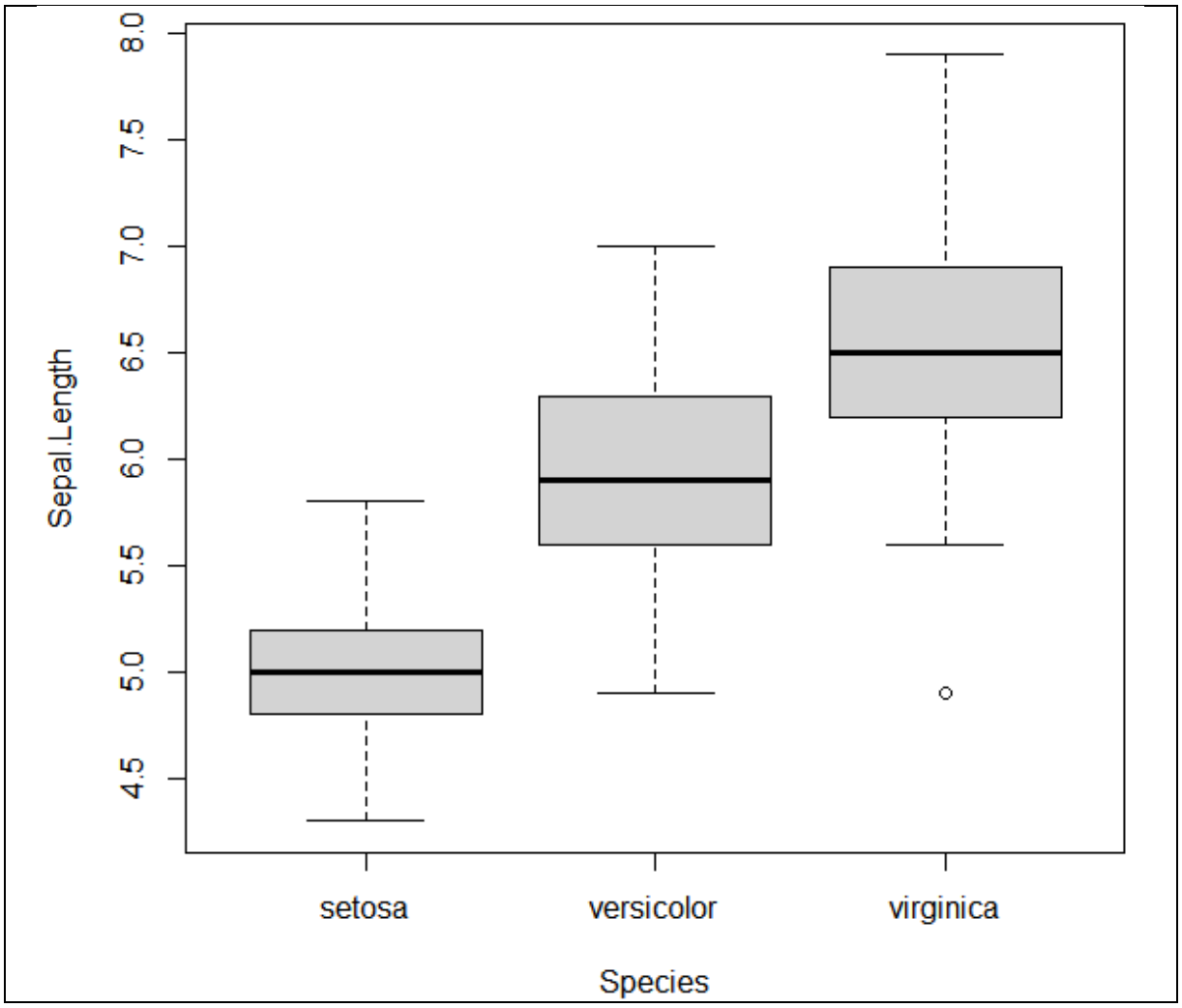
#3장 연습문제 9

```
head(iris); names(iris)
Sepal.Length<-iris$Sepal.Length
Species<-iris$Species

# 1)
aggregate(Sepal.Length~Species,data = iris, mean)
aggregate(Sepal.Length~Species,data = iris, sd)

#2)
boxplot(Sepal.Length~Species, data = iris)
```

```
> head(iris); names(iris)
  Sepal.Length Sepal.Width Petal.Length Petal.Width Species
1          5.1         3.5          1.4         0.2  setosa
2          4.9         3.0          1.4         0.2  setosa
3          4.7         3.2          1.3         0.2  setosa
4          4.6         3.1          1.5         0.2  setosa
5          5.0         3.6          1.4         0.2  setosa
6          5.4         3.9          1.7         0.4  setosa
[1] "Sepal.Length" "Sepal.Width"  "Petal.Length" "Petal.Width"  "Species"
> Sepal.Length<-iris$Sepal.Length
> Species<-iris$Species
>
>
> aggregate(Sepal.Length~Species,data = iris, mean)
     Species Sepal.Length
1     setosa        5.006
2 versicolor        5.936
3  virginica        6.588
> aggregate(Sepal.Length~Species,data = iris, sd)
     Species Sepal.Length
1     setosa    0.3524897
2 versicolor    0.5161711
3  virginica    0.6358796
```


Sepal.Length
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
setosa
versicolor
virginica
Species

#3장 연습문제 10

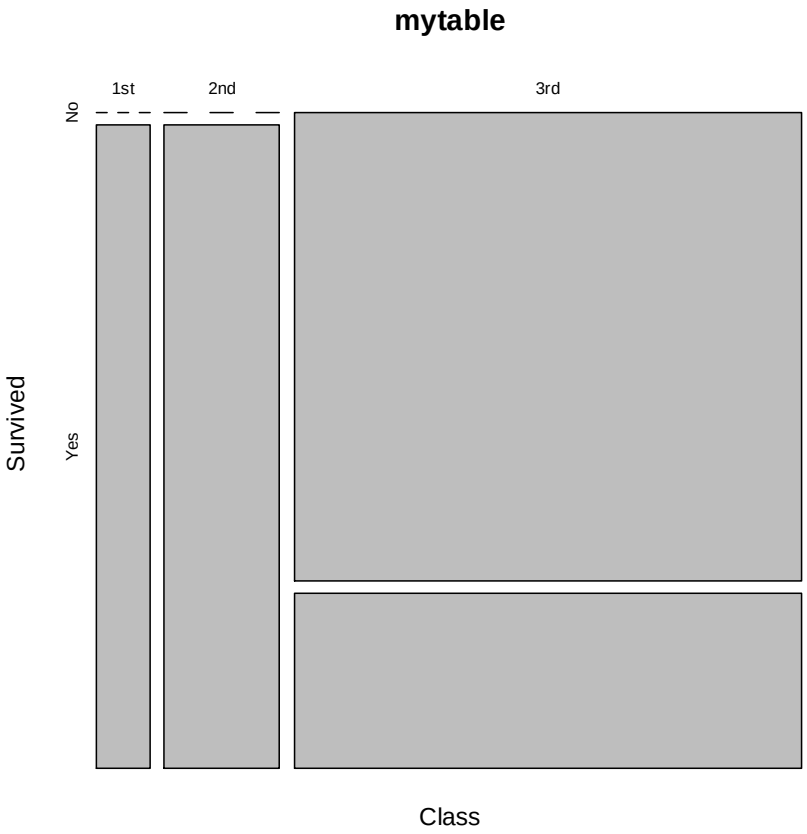
```
mytable <- Titanic[1:3, "Male", "Child",]
CrossTable(mytable)
plot(mytable)
```

```
> CrossTable(mytable)


   Cell Contents
|-------------------------|
|                       N |
| Chi-square contribution |
|           N / Row Total |
|           N / Col Total |
|         N / Table Total |
|-------------------------|


Total Observations in Table:  64


             | Survived
       Class |        No |       Yes | Row Total |
-------------|-----------|-----------|-----------|
         1st |         0 |         5 |         5 |
             |     2.734 |     3.300 |           |
             |     0.000 |     1.000 |     0.078 |
             |     0.000 |     0.172 |           |
             |     0.000 |     0.078 |           |
-------------|-----------|-----------|-----------|
         2nd |         0 |        11 |        11 |
             |     6.016 |     7.260 |           |
             |     0.000 |     1.000 |     0.172 |
             |     0.000 |     0.379 |           |
             |     0.000 |     0.172 |           |
-------------|-----------|-----------|-----------|
         3rd |        35 |        13 |        48 |
             |     2.917 |     3.520 |           |
             |     0.729 |     0.271 |     0.750 |
             |     1.000 |     0.448 |           |
             |     0.547 |     0.203 |           |
-------------|-----------|-----------|-----------|
Column Total |        35 |        29 |        64 |
             |     0.547 |     0.453 |           |
-------------|-----------|-----------|-----------|
```


mytable
1st
2nd
3rd
No
Yes
Survived
Class