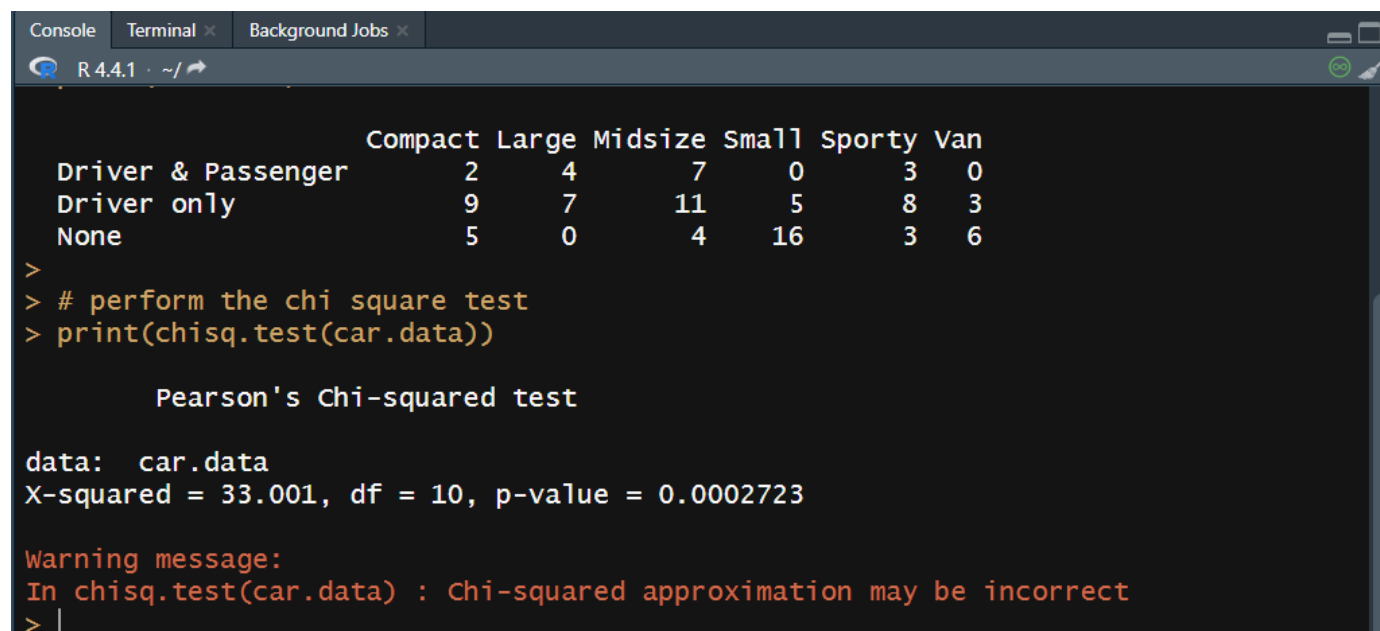# Chi Square Test

```r
# R's built in mass library that contains Cars93 dataset
library(MASS)
# print(str(Cars93))

#create a data frame from the main data set
car.data = data.frame(Cars93$AirBags, Cars93$Type)

#create a table with the needed variables
car.data = table(Cars93$AirBags,Cars93$Type)
print(car.data)

# perform the chi square test
print(chisq.test(car.data))
```

```
Console    Terminal ×    Background Jobs ×

R 4.4.1 · ~/

                    Compact Large Midsize Small Sporty Van
  Driver & Passenger      2     4       7     0      3   0
  Driver only             9     7      11     5      8   3
  None                    5     0       4    16      3   6
>
> # perform the chi square test
> print(chisq.test(car.data))

        Pearson's Chi-squared test

data:  car.data
X-squared = 33.001, df = 10, p-value = 0.0002723

Warning message:
In chisq.test(car.data) : Chi-squared approximation may be incorrect
>
```