IT24102307

```r
setwd("C:\\Users\\msi\\Downloads")
getwd()

#Exercise

#i.
observed<-c(120,95,85,100)
prob<-c(.25,.25,.25,.25)
chisq.test(x=observed,p=prob)

#ii.
file_path <-  "http://www.sthda.com/sthda/RDoc/data/housetasks.txt"
housetasks <- read.delim(file_path, row.names = 1)
housetasks

chisq <- chisq.test(housetasks)
chisq

#iii.
#consider 5% level of significance for the test
#Rejection region:if the p value for the test id less than 0.05
#reject the null hypothesis at the 5% level of significant
#p level for the level is 0.08966
#Conclusion:since the p value is (0.08966) is greater than 0.05 ,do not reject the null hypothesis at 5%
#level pf significance .therefore  we can conclude that of customers choosing 4 snack types will be same which is 0.2
```

```
> getwd()
[1] "C:/Users/msi/Downloads"
> #i.
> observed<-c(120,95,85,100)
> prob<-c(.25,.25,.25,.25)
> chisq.test(x=observed,p=prob)

        Chi-squared test for given probabilities

data:  observed
X-squared = 6.5, df = 3, p-value = 0.08966

> #ii.
> file_path <-  "http://www.sthda.com/sthda/RDoc/data/housetasks.txt"
> housetasks <- read.delim(file_path, row.names =  1)
> housetasks
           Wife Alternating Husband Jointly
Laundry     156          14       2       4
Main_meal   124          20       5       4
Dinner       77          11       7      13
Breakfeast   82          36      15       7
Tidying      53          11       1      57
Dishes       32          24       4      53
Shopping     33          23       9      55
Official     12          46      23      15
Driving      10          51      75       3
Finances     13          13      21      66
Insurance     8           1      53      77
Repairs       0           3     160       2
Holidays      0           1       6     153
> chisq <- chisq.test(housetasks)
> chisq

        Pearson's Chi-squared test

data:  housetasks
X-squared = 1944.5, df = 36, p-value < 2.2e-16
```

```
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> #i.
> observed<-c(120,95,85,100)
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        Chi-squared test for given probabilities

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X-squared = 6.5, df = 3, p-value = 0.08966

> #ii.
> file_path <-  "http://www.sthda.com/sthda/RDoc/data/housetasks.txt"
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        Pearson's Chi-squared test

data:  housetasks
X-squared = 1944.5, df = 36, p-value < 2.2e-16
```