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#### IT24103976

## **IT2120- Probability and Statistics**

## Labsheet - 10

## **Exercise**

(01)

```
➡ Run | ➡ ☆ ⇩ | ➡ Source ▼
 1 setwd("C:\\Users\\NethuRe\\OneDrive\\Desktop\\IT24103976")
  2 getwd()
  4 #IT2120- Probability and Statistics
  5 #Lab Sheet 10
  6
  7 #Exercise
  8 #(01)
 9 #(ii)
 10 data <- read.csv("C:\\Users\\NethuRe\\OneDrive\\Desktop\\IT24103976\\Data - Copy.csv")
 11 print(data)
 12
 13
 14 Snack <- c("A", "B", "C", "D")
15 Count <- c(120, 95, 85, 100)
 16 data <- data.frame(Snack, Count)</pre>
 17 print(data)
 18
 19 observed <- data$Count
 20
 21 expected <- rep(sum(observed) / length(observed), length(observed) )
 22
 23 chisq.test( observed, p = rep(1/4, 4) )
 24
 25
 26
```

```
> setwd("C:\\Users\\NethuRe\\OneDrive\\Desktop\\11241039/6")
 [1] "C:/Users/NethuRe/OneDrive/Desktop/IT24103976"
 > #IT2120- Probability and Statistics
 > #Lab Sheet 10
 > #Exercise
 > #(01)
 > #(ii)
 > data <- read.csv("C:\\Users\\NethuRe\\OneDrive\\Desktop\\IT24103976\\Data - Copy.csv")
 > print(data)
            X Wife Alternating Husband Jointly
       Laundry
               156
                            14
     Main_meal
               124
                            20
                                     5
                                             4
 3
       Dinner
                            11
                                            13
 4
   Breakfeast
                            36
                                    15
       Tidying
                53
                            11
                                     1
       Dishes
                32
                            24
                                            53
 6
                            23
                                            55
      Shopping
                33
 8
     Official
                12
                            46
                                    23
                                            15
 9
      Driving
                10
                            51
                                    75
                                             3
 10
     Finances
                                    21
                                            66
                13
                            13
                                           77
2
 11 Insurance
                 8
                                    53
                             1
      Repairs
                 0
                             3
 12
                                   160
 13
     Holidays
                 0
                                           153
 > Snack <- c("A", "B", "C", "D")
> Count <- c(120, 95, 85, 100)
 > data <- data.frame(Snack, Count)</pre>
 > print(data)
   Snack Count
         120
      В
           95
 2
           85
 3
      C
          100
 4
       D
> observed <- data$Count
> expected <- rep(sum(observed) / length(observed), length(observed) )</pre>
> chisq.test( observed, p = rep(1/4, 4) )
          Chi-squared test for given probabilities
data: observed
X-squared = 6.5, df = 3, p-value = 0.08966
```

Data		
0 data	13 obs. of 5 variables	
Values		
Count	num [1:4] 120 95 85 100	
expected	num [1:4] 100 100 100 100	
observed	num [1:4] 120 95 85 100	
Snack	chr [1:4] "A" "B" "C" "D"	
Snack	Cnr [1:4] "A" "B" "C" "D"	