

Student Id – IT24100786

Name – Rathnasekara D A M S R

Lab sheet 10

1

```
> 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
```

2

```
> file_path <- "http://www.sthda.com/sthda/RDoc/data/housetasks.txt"
> 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
Breakfast  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

> |
```

3

```
> ##Q3
> #Consider 25% level of significant for the class
> #Rejection Region: if the p value for the test is less than 0.25,
> #Reject the null hypothesis at 25% level of significant
> #P value for the test got as 2.2e-16
> |
```