

Student Id – IT24102326

Name – Dadallage.S

Lab sheet 10

1.

```
> setwd("C:\\Users\\User\\Desktop\\it24102326_Lab10")
> getwd()
[1] "C:/Users/User/Desktop/it24102326_Lab10"
> ##Q1
>
> 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"
>
> 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

```

```

> |

```

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
> |

```
