

```
> 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
```

1

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
> |
```