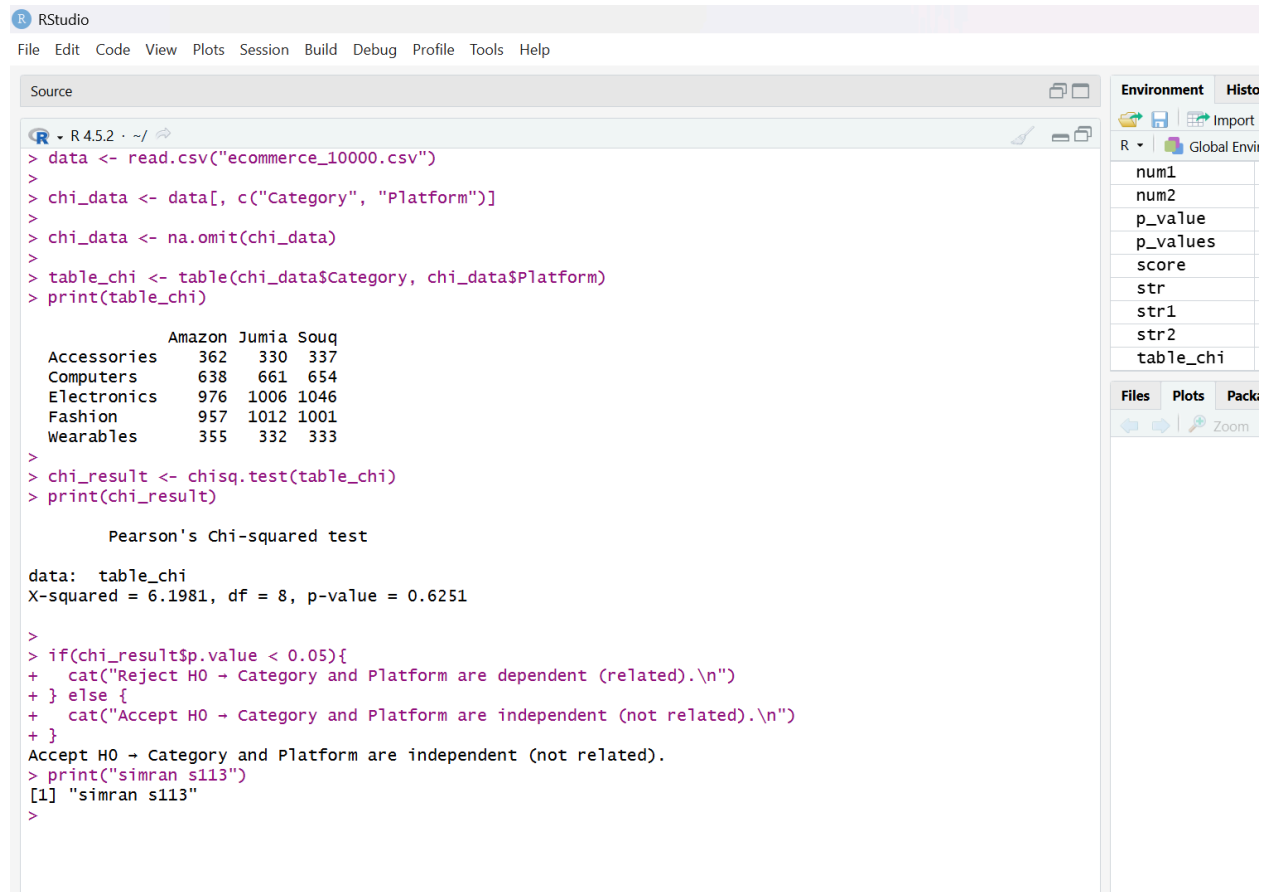


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Practical no. 9 mod2

Aim:Conducting Chi-square tests using chisq.test() (R)



The screenshot shows the RStudio interface with a script editor on the left and the Environment pane on the right. The script performs a Chi-square test on data from 'ecommerce_10000.csv'. The output in the console shows the Pearson's Chi-squared test results, including the data table, the test statistic (X-squared = 6.1981), degrees of freedom (df = 8), and p-value (p-value = 0.6251). The script concludes that the null hypothesis is accepted, indicating that the category and platform are independent.

```
> data <- read.csv("ecommerce_10000.csv")
> chi_data <- data[, c("Category", "Platform")]
> chi_data <- na.omit(chi_data)
> table_chi <- table(chi_data$Category, chi_data$Platform)
> print(table_chi)

      Amazon Jumia Souq
Accessories 362  330  337
Computers   638  661  654
Electronics 976 1006 1046
Fashion     957 1012 1001
Wearables   355  332  333

> chi_result <- chisq.test(table_chi)
> print(chi_result)

      Pearson's Chi-squared test

data:  table_chi
X-squared = 6.1981, df = 8, p-value = 0.6251

>
> if(chi_result$p.value < 0.05){
+   cat("Reject H0 -> Category and Platform are dependent (related).\n")
+ } else {
+   cat("Accept H0 -> Category and Platform are independent (not related).\n")
+ }
Accept H0 -> Category and Platform are independent (not related).
> print("simran s113")
[1] "simran s113"
>
```

The Environment pane on the right shows the following objects: num1, num2, p_value, p_values, score, str, str1, str2, and table_chi.

Name: Simran s113