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Practical no. 9 mod2

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

The screenshot shows the RStudio interface with the following details:

- File Menu:** File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help.
- Source Editor:** Displays R code for reading a CSV file, filtering data by Category and Platform, removing NA values, creating a contingency table, performing a Chi-square test, and printing the results. The output shows the test statistic (X-squared = 6.1981), degrees of freedom (df = 8), and p-value (0.6251). It also includes a conditional statement to print whether H0 is rejected or accepted based on the p-value.
- Environment View:** Shows global variables: num1, num2, p_value, p_values, score, str, str1, str2, and table_chi.
- Plots View:** Shows tabs for Files, Plots, and Pack.

```
R > 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"
>
```

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