

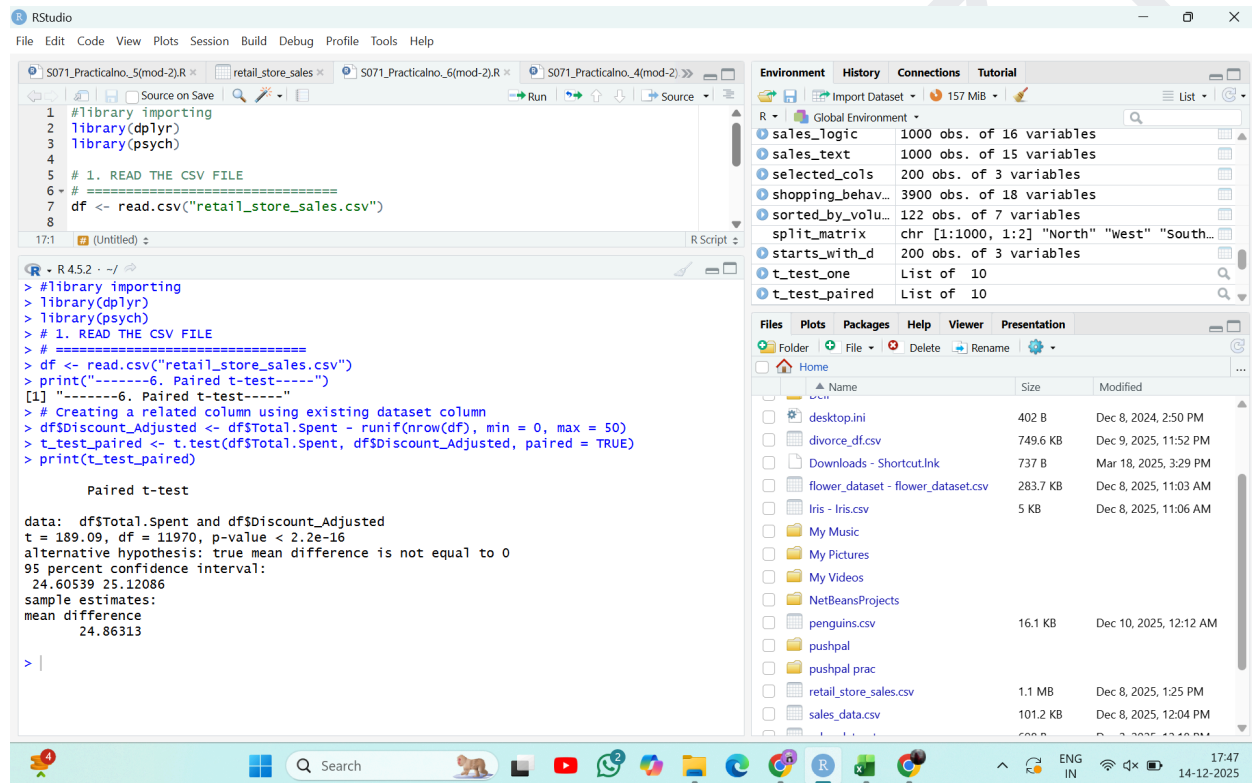
SHETH L.U.J AND SIR M.V COLLEGE

Subject: Data Analysis with SAS / SPSS / R

Practical no. 6

Aim: Performing paired t-tests using `t.test(paired=TRUE)` (R).

Outputs→



The screenshot displays the RStudio interface with the following components:

- Source Editor:** Contains R code for library imports, reading a CSV file, and performing a paired t-test.
- Console:** Shows the execution output, including the t-test results.
- Environment:** Lists objects in the global environment, such as `sales_logic`, `sales_text`, and `t_test_one`.
- Files:** Shows the file explorer with various datasets and scripts.

```
# R code from the source editor
1 #library importing
2 library(dplyr)
3 library(psych)
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5 # 1. READ THE CSV FILE
6 # =====
7 df <- read.csv("retail_store_sales.csv")
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```

Console Output:

```
> #library importing
> library(dplyr)
> library(psych)
> # 1. READ THE CSV FILE
> # =====
> df <- read.csv("retail_store_sales.csv")
> print("-----6. Paired t-test-----")
[1] "-----6. Paired t-test-----"
> # Creating a related column using existing dataset column
> df$Discount_Adjusted <- df$Total.Spent - runif(nrow(df), min = 0, max = 50)
> t_test_one <- t.test(df$Total.Spent, df$Discount_Adjusted, paired = TRUE)
> print(t_test_one)

Paired t-test

data: df$Total.Spent and df$Discount_Adjusted
t = 189.09, df = 11970, p-value < 2.2e-16
alternative hypothesis: true mean difference is not equal to 0
95 percent confidence interval:
 24.60539 25.12086
sample estimates:
mean difference
 24.86313
```