

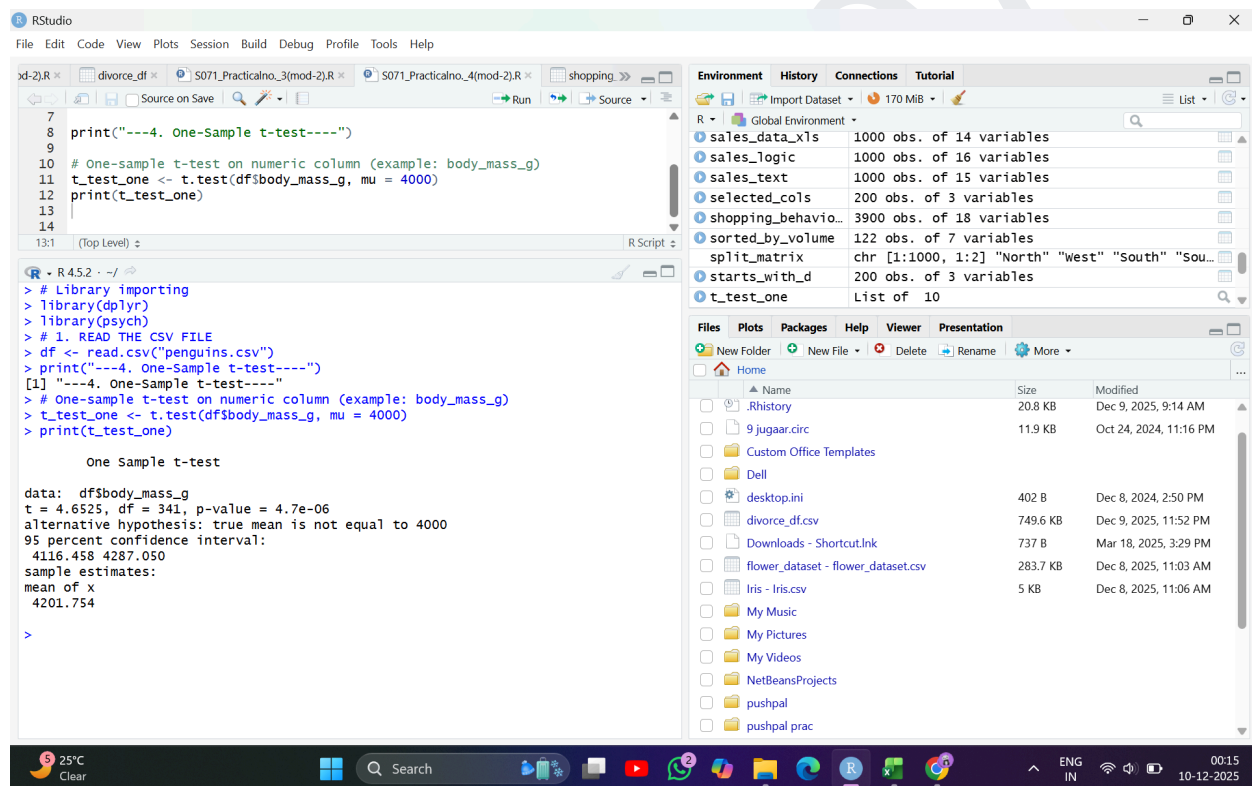
SHETH L.U.J AND SIR M.V COLLEGE

Subject: Data Analysis with SAS / SPSS /R

Practical no. 4

Aim: Performing one-sample t-tests using t.test() (R)

Outputs→



The screenshot displays the RStudio interface. The script editor on the left contains the following R code:

```
7  
8 print("----4. One-Sample t-test----")  
9  
10 # One-sample t-test on numeric column (example: body_mass_g)  
11 t_test_one <- t.test(df$body_mass_g, mu = 4000)  
12 print(t_test_one)  
13  
14
```

The console on the right shows the output of the code:

```
> # Library importing  
> library(dplyr)  
> library(psych)  
> # 1. READ THE CSV FILE  
> df <- read.csv("penguins.csv")  
> print("----4. One-Sample t-test----")  
[1] "----4. One-Sample t-test----"  
> # One-sample t-test on numeric column (example: body_mass_g)  
> t_test_one <- t.test(df$body_mass_g, mu = 4000)  
> print(t_test_one)  
  
One Sample t-test  
  
data: df$body_mass_g  
t = 4.6525, df = 341, p-value = 4.7e-06  
alternative hypothesis: true mean is not equal to 4000  
95 percent confidence interval:  
 4116.458 4287.050  
sample estimates:  
mean of x  
 4201.754  
>
```

The Environment pane on the right lists the objects in the global environment:

Object	Details
sales_data_xls	1000 obs. of 14 variables
sales_logic	1000 obs. of 16 variables
sales_text	1000 obs. of 15 variables
selected_cols	200 obs. of 3 variables
shopping_behavio...	3900 obs. of 18 variables
sorted_by_volume	122 obs. of 7 variables
split_matrix	chr [1:1000, 1:2] "North" "west" "South" "Sou..."
starts_with_d	200 obs. of 3 variables
t_test_one	List of 10

The Files pane on the right shows the file explorer with various files and folders, including .Rhistory, 9 jugaar.circ, Custom Office Templates, Dell, desktop.ini, divorce_df.csv, Downloads - Shortcut.lnk, flower_dataset - flower_dataset.csv, Iris - Iris.csv, My Music, My Pictures, My Videos, NetBeansProjects, pushpal, and pushpal prac.