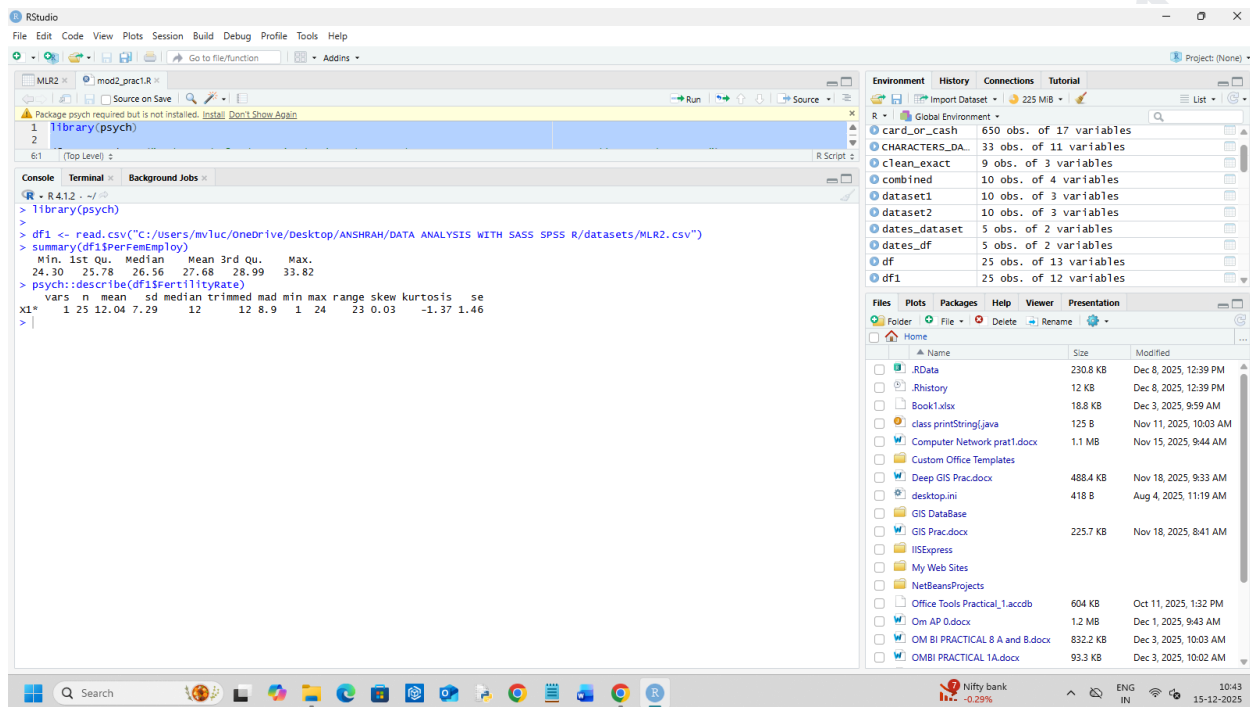


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AIM: M2: Practical 1 to 6
Generating descriptive statistics using summary() or describe() (R).
Generating frequency tables using table() or count() (R).
Creating cross-tabulations and two-way tables using table() (R).
Performing one-sample t-tests using t.test() (R).
Performing independent two-sample t-tests using t.test() with grouping (R).
Performing paired t-tests using t.test(paired=TRUE) (R).
NOTE: Use diffenet Dataset

PRACTICAL 1 OUTPUT:



The screenshot shows the RStudio interface with the following content:

Source Editor: mod2_prac1.R

```
1 library(psych)
2
61 (Top Level)
```

Console:

```
R - R 4.1.2 - ~/R
> library(psych)
>
> df1 <- read.csv("C:/Users/mv1uc/OneDrive/desktop/ANSHRAH/DATA ANALYSIS WITH SASS SPSS R/datasets/MLR2.csv")
> summary(df1$PerFemEmploy)
   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
  24.30  25.78   26.56   27.68  28.99   33.82
> psych::describe(df1$fert11ityRate)
   vars  n mean  sd median trimmed mad min max range skew kurtosis  se
X1*    1  25 12.04 7.29   12    12 8.9  1  24   23 0.03  -1.37 1.46
> |
```

Environment:

Object	Class	Attributes
card_or_cash	data.frame	650 obs. of 17 variables
CHARACTERS_DA	data.frame	33 obs. of 11 variables
Clean_exact	data.frame	9 obs. of 3 variables
combined	data.frame	10 obs. of 4 variables
dataset1	data.frame	10 obs. of 3 variables
dataset2	data.frame	10 obs. of 3 variables
dates_dataset	data.frame	5 obs. of 2 variables
dates_df	data.frame	5 obs. of 2 variables
df	data.frame	25 obs. of 13 variables
df1	data.frame	25 obs. of 12 variables

Files:

Name	Size	Modified
.RData	230.8 KB	Dec 8, 2025, 12:39 PM
.Rhistory	12 KB	Dec 8, 2025, 12:39 PM
Book1.xlsx	18.8 KB	Dec 3, 2025, 9:59 AM
class printString.java	125 B	Nov 11, 2025, 10:03 AM
Computer Network prat1.docx	1.1 MB	Nov 15, 2025, 9:44 AM
Custom Office Templates		
Deep GIS Prac.docx	488.4 KB	Nov 18, 2025, 9:33 AM
desktop.ini	418 B	Aug 4, 2025, 11:19 AM
GIS DataBase		
GIS Prac.docx	225.7 KB	Nov 18, 2025, 8:41 AM
IISExpress		
My Web Sites		
NetBeansProjects		
Office Tools Practical_1.accd	604 KB	Oct 11, 2025, 1:32 PM
Om AP 0.docx	1.2 MB	Dec 1, 2025, 9:43 AM
OM BI PRACTICAL 8 A and B.docx	832.2 KB	Dec 3, 2025, 10:03 AM
OMBI PRACTICAL 1A.docx	93.3 KB	Dec 3, 2025, 10:02 AM

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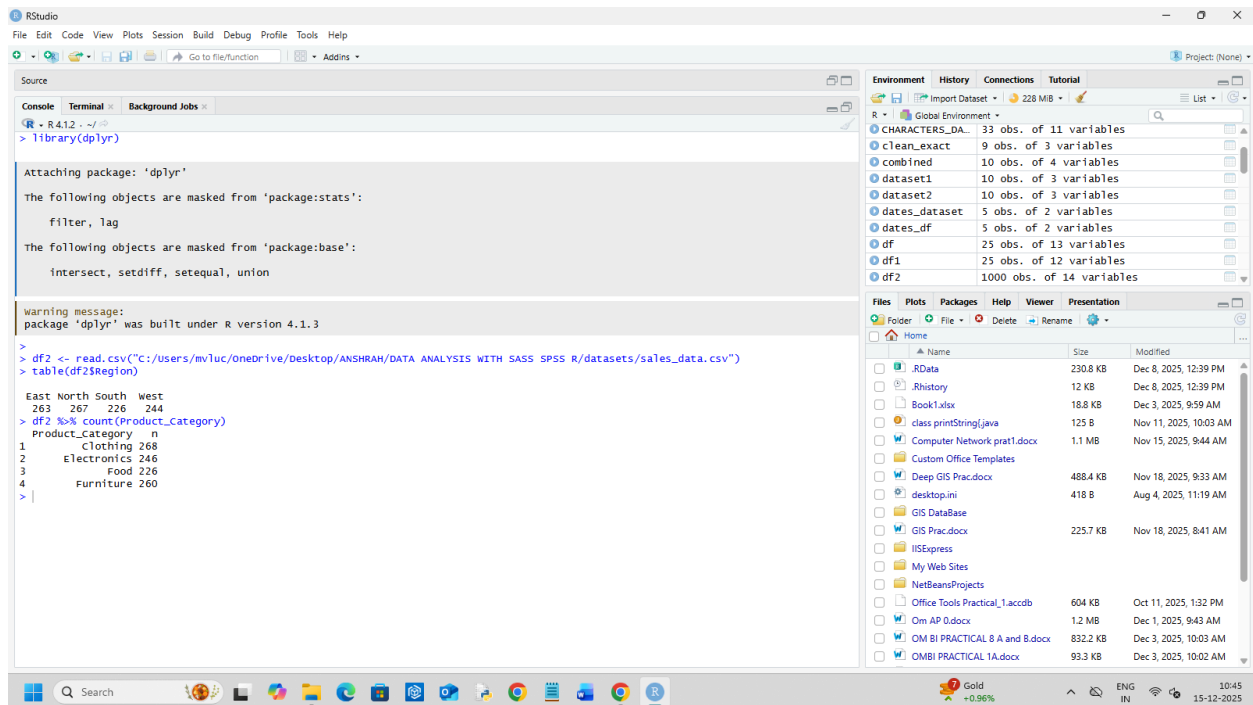
SYCS

S111

DATA ANALYSIS MODULE 2 PRAC 1-6

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PRACTICAL 2 OUTPUT:



```
R - R 4.1.2 ~ /
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function Addins

Source
Console Terminal Background Jobs

> library(dplyr)

Attaching package: 'dplyr'

The following objects are masked from 'package:stats':
  filter, lag

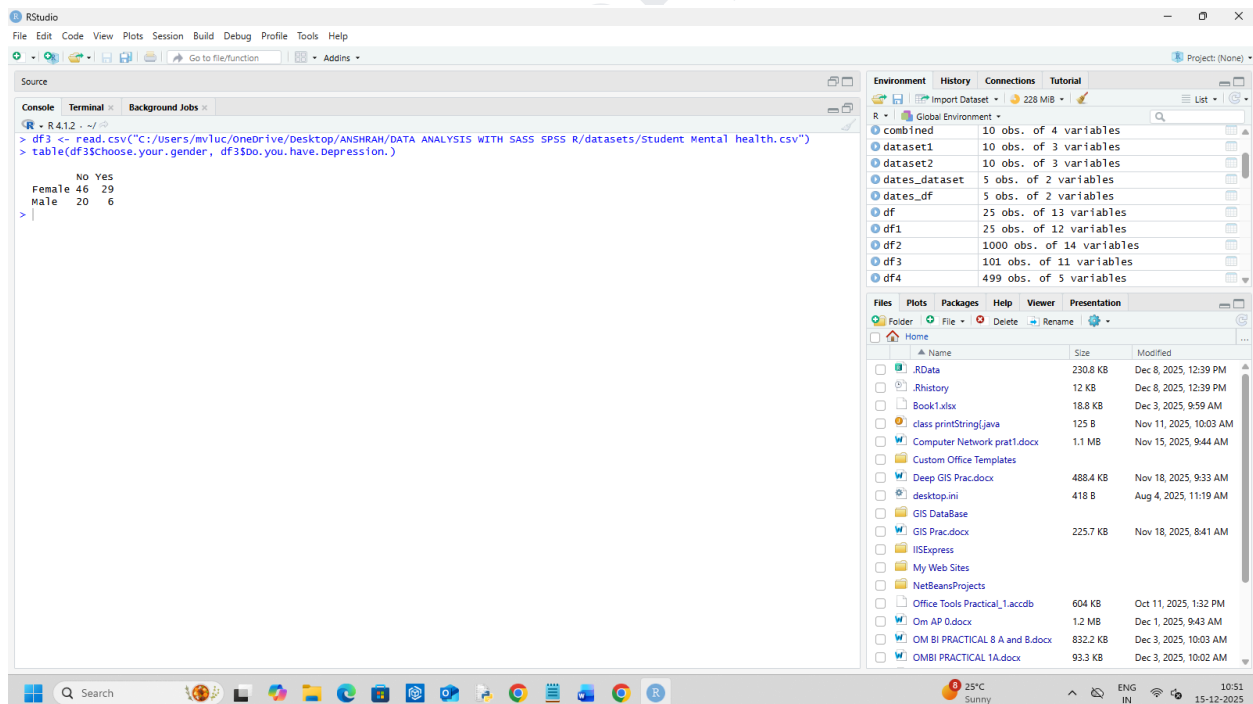
The following objects are masked from 'package:base':
  intersect, setdiff, setequal, union

warning message:
package 'dplyr' was built under R version 4.1.3

> df2 <- read.csv("C:/users/mv1uc/oneDrive/Desktop/ANSHRAH/DATA ANALYSIS WITH SASS SPSS R/datasets/sales_data.csv")
> table(df2$Region)

East North South West
263 267 226 244
> df2 %>% count(Product_Category)
  Product_Category n
1      Clothing 268
2      Electronics 246
3      Food 226
4      Furniture 260
> |
```

PRACTICAL 3 OUTPUT:



```
R - R 4.1.2 ~ /
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function Addins

Source
Console Terminal Background Jobs

> df3 <- read.csv("C:/users/mv1uc/oneDrive/Desktop/ANSHRAH/DATA ANALYSIS WITH SASS SPSS R/datasets/Student Mental health.csv")
> table(df3$choose.your.gender, df3$do.you.have.depression.)

      NO Yes
Female 46 29
Male   20  6
> |
```

PRACTICAL 4 OUTPUT:

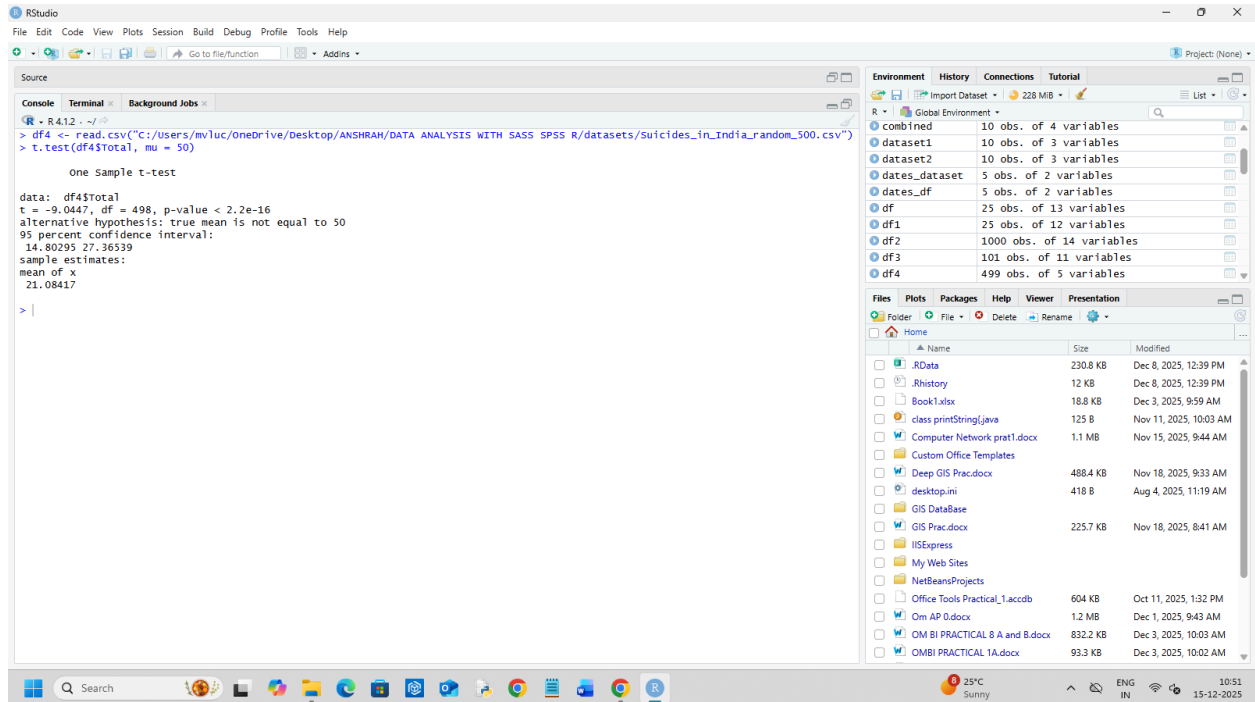
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SYCS

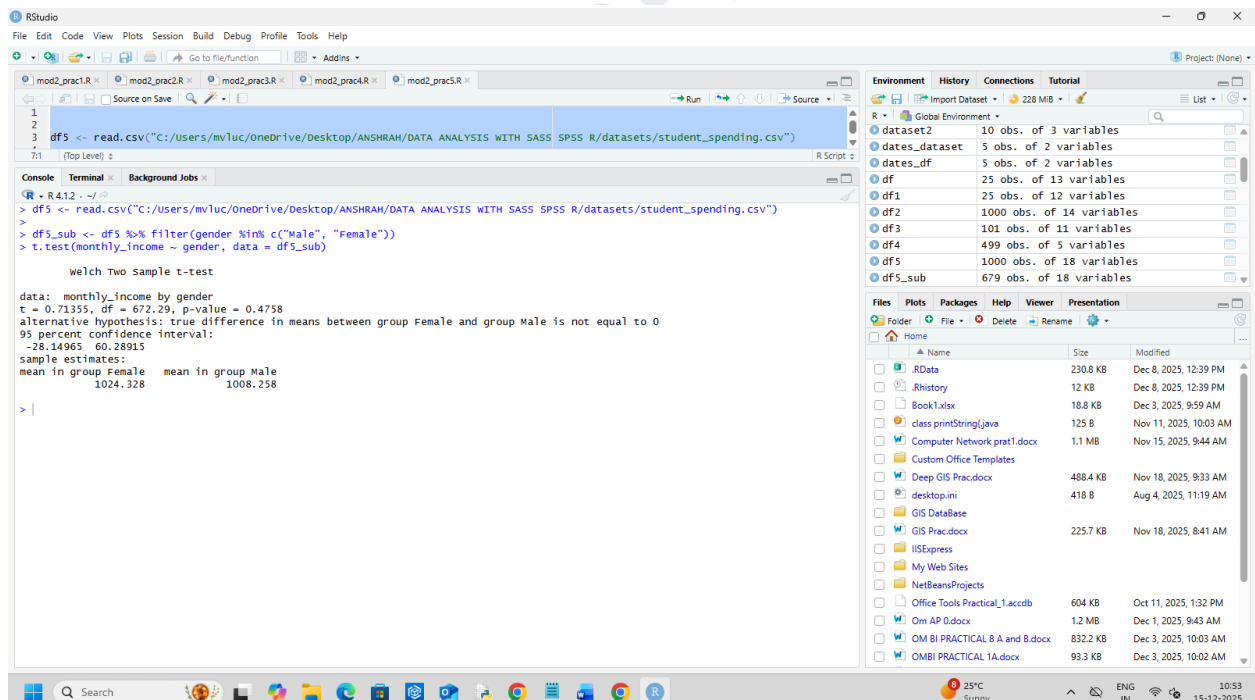
S111

DATA ANALYSIS MODULE 2 PRAC 1-6

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PRACTICAL 5 OUTPUT:



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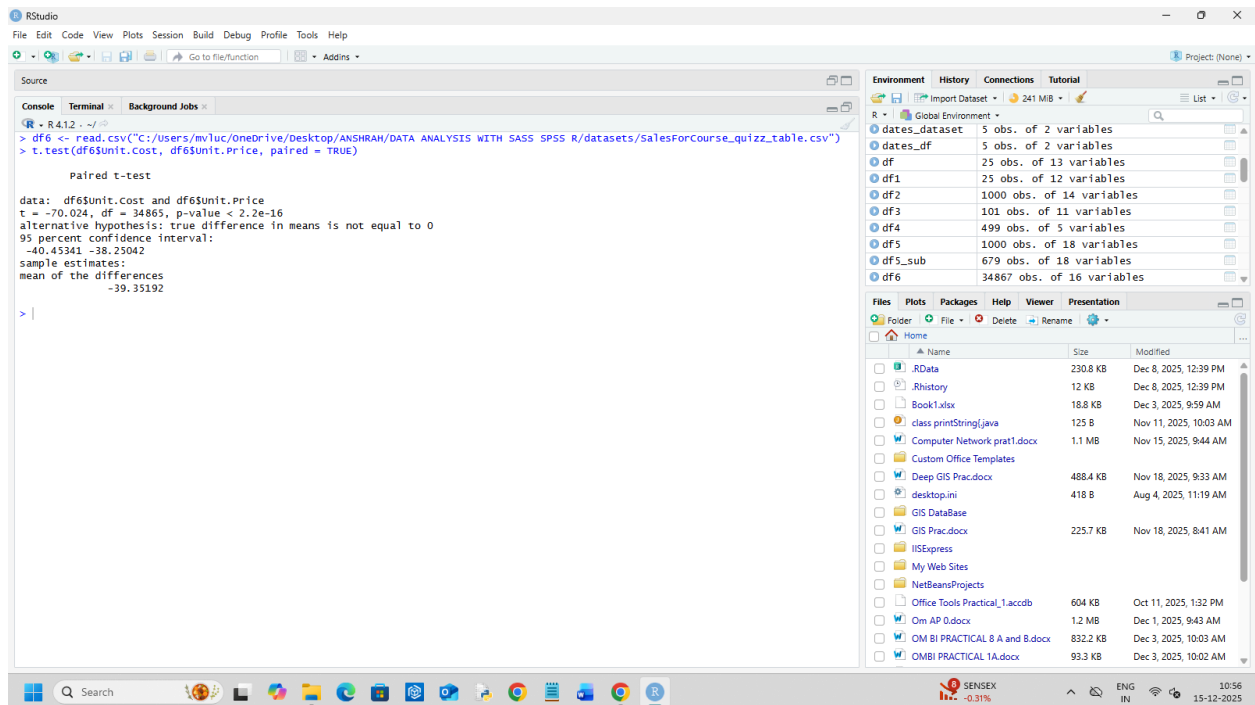
SYCS

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DATA ANALYSIS MODULE 2 PRAC 1-6

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PRACTICAL 6 OUTPUT:



The screenshot displays the RStudio interface. The console shows the execution of a paired t-test on two datasets, df6\$Unit.Cost and df6\$Unit.Price. The output indicates a significant difference in means (p-value < 2.2e-16). The environment pane on the right lists various data frames and their dimensions.

```
> df6 <- read.csv("C:/Users/mvlu/OneDrive/Desktop/ANSHRAH/DATA ANALYSIS WITH SASS SPSS R/datasets/salesForCourse_quizz_table.csv")
> t.test(df6$Unit.Cost, df6$Unit.Price, paired = TRUE)

Paired t-test

data: df6$Unit.Cost and df6$Unit.Price
t = -70.024, df = 34865, p-value < 2.2e-16
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -40.45341 -38.25042
sample estimates:
mean of the differences
-39.35192

> |
```

Object	Dimensions
dates_dataset	5 obs. of 2 variables
dates_df	5 obs. of 2 variables
df	25 obs. of 13 variables
df1	25 obs. of 12 variables
df2	1000 obs. of 14 variables
df3	101 obs. of 11 variables
df4	499 obs. of 5 variables
df5	1000 obs. of 18 variables
df5_sub	679 obs. of 18 variables
df6	34867 obs. of 16 variables

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SYCS

S111

DATA ANALYSIS MODULE 2 PRAC 1-6