

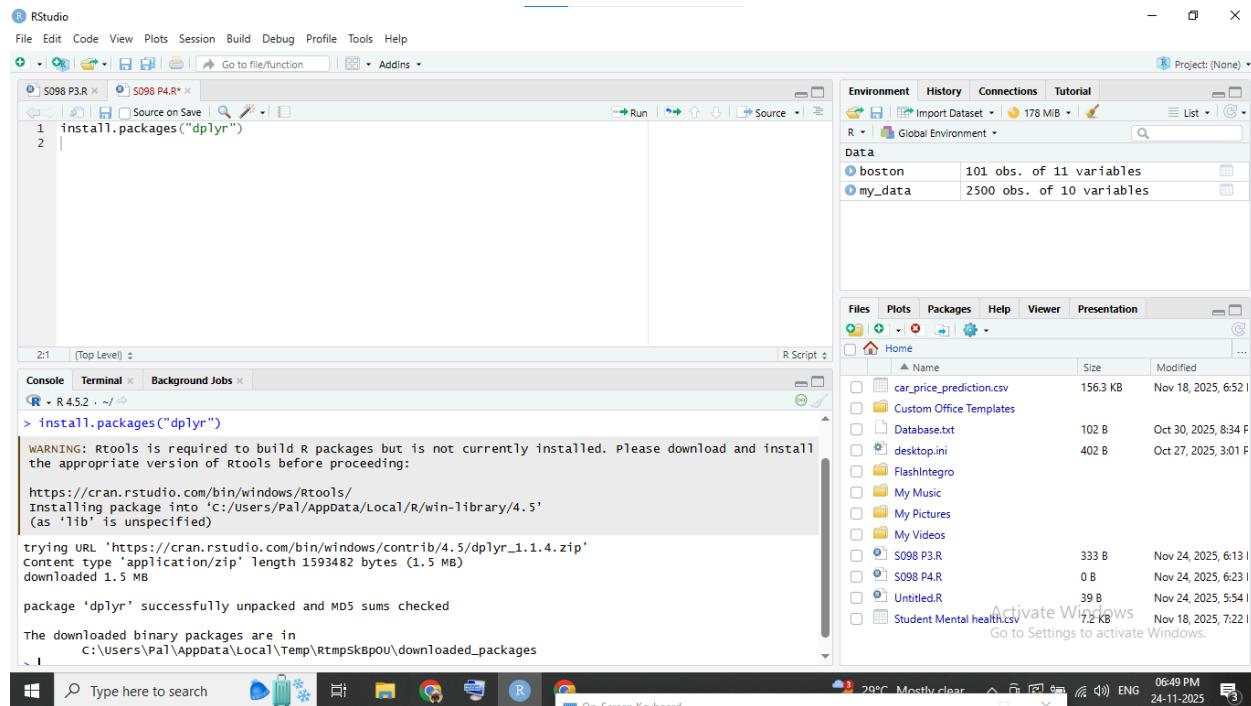
# MVLU COLLEGE

## Subject:-Data Analysis with SAS / SPSS /R

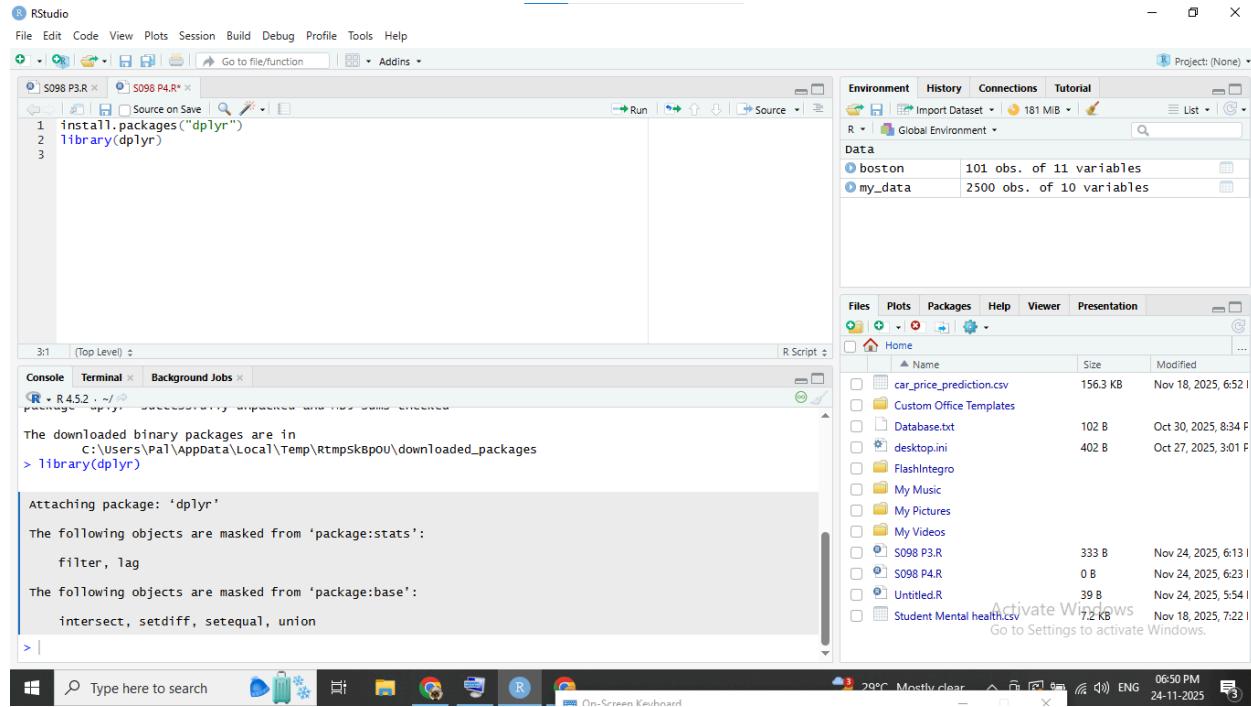
### Practical no.: -4

**Aim:-Applying conditional filters subset() or filter() in R.**

**install.packages("dplyr")**



**library(dplyr)**



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```
library(readr)
```

The screenshot shows the RStudio interface with the following details:

- File Menu:** File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help.
- Addins:** Go to file/function, Addins.
- Code Editor:** Two tabs open: S098 P3.R and S098 P4.R. The S098 P4.R tab contains the following R code:

```
library(readr)
```
- Console:** Displays the output of the R code:

```
install the appropriate version of Rtools before proceeding:  
https://cran.rstudio.com/bin/windows/Rtools/  
Installing package into 'C:/Users/Pal/AppData/Local/R/win-library/4.5'  
(as 'lib' is unspecified)  
also installing the dependency 'generics',  
trying URL 'https://cran.rstudio.com/bin/windows/contrib/4.5/generics_0.1.4.zip'  
trying URL 'https://cran.rstudio.com/bin/windows/contrib/4.5/dplyr_1.1.4.zip'  
package 'generics' successfully unpacked and MD5 sums checked  
package 'dplyr' successfully unpacked and MD5 sums checked  
The downloaded binary packages are in  
C:/Users/Pal/AppData/Local/Temp/Rtmpk6GWLQ/downloaded_packages  
> 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  
> library(readr)  
>
```
- Environment:** Shows the global environment with one object: my\_data (2500 obs. of 10 variables).
- File Explorer:** Shows the local directory structure with files like car\_price\_prediction.csv, Custom Office Templates, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098 P3.R, S098 P4.R, and Untitled.R.
- System Tray:** Shows battery level (29%), temperature (29°C), signal strength, and system status (ENG 24-11-2025).

```
mental <- read_csv("Student Mental health.csv")
```

The screenshot shows the RStudio interface. The top menu bar includes File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help, and a Go to file/function button. The left sidebar has tabs for S098 P3.R and S098 P4.R, with Student\_Mental\_health selected. The main code editor contains R code for reading a CSV file and creating subsets based on age and depression symptoms. The console window shows the execution of the script, including the loading of the 'student Mental health.csv' file and its structure. The right sidebar displays the Environment pane with global variables like boston, high\_age\_subset, mental, my\_data, and Student\_Mental... listed with their respective sizes and types. Below it is the Files pane showing local files such as car\_price\_prediction.csv, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098 P3.R, S098 P4.R, Untitled.R, and Student Mental health.csv. A watermark for 'Activate Windows' is visible in the bottom right corner.

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## head(mental)

The screenshot shows an RStudio interface with the following details:

- File Menu:** File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help.
- Addins:** A dropdown menu showing "S098 P4.R" and "Student\_Mental\_health".
- Code Editor:** The main workspace contains R code for reading a CSV file and creating subsets based on age and depression levels. It also includes a warning message about column specification and a preview of the data frame structure.
- Console:** Shows the R version as R 4.5.2 - .
- Environment:** A sidebar showing the global environment with objects like boston, high\_age\_subset, mental, my\_data, and student\_Mental.
- Files:** A sidebar showing files in the current directory, including car\_price\_prediction.csv, Custom Office Templates, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098 P3.R, S098 P4.R, Untitled.R, and Student Mental health.csv.
- Bottom Status Bar:** Includes icons for network, battery, volume, and system status, along with the text "Activate Windows" and "Go to Settings to activate Windows".

```
high_age_subset <- subset(mental, Age > 22)
```

The screenshot shows an RStudio interface with the following details:

- File Menu:** File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help.
- Addins:** A dropdown menu showing "S098 P4.R" and "Student\_Mental\_health".
- Code Editor:** An R script titled "S098 P4.R" containing code to load packages, read a CSV file, subset data for students aged over 22, and print summary statistics. The code includes comments and a question about depression.
- Console:** Displays R session output. It shows the creation of a tibble from a CSV file, the first few rows of the data, and a warning message about column types. The data includes columns for timestamp, gender, course, year of study, and various mental health questions.
- Environment:** A sidebar showing the global environment with objects like "boston", "high\_age\_subset", "mental", "my\_data", and "student\_Mental\_health".
- Files:** A sidebar showing files in the current directory, including "car\_price\_prediction.csv", "Custom Office Templates", "Database.txt", "desktop.ini", "FlashIntegro", "My Music", "My Pictures", "My Videos", "S098 P3.R", "S098 P4.R", "Untitled.R", and "Student Mental health.csv".
- Status Bar:** Shows the date (24-11-2025), time (07:08 PM), battery level (72%), signal strength, and network connection.

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`cat("Number of students with Age > 22:", nrow(high_age_subset), "\n")`

The screenshot shows the RStudio interface with the following details:

- Project:** (None)
- Environment:** Shows objects: boston, high\_age\_subset, mental, my\_data, Student\_Ment... (101 obs. of 11 variables).
- Files:** Shows files: car\_price\_prediction.csv, Custom Office Templates, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098 P3.R, S098 P4.R, Untitled.R, Student Mental health.csv.
- Console:** Displays the R session output:
 

```
R > cat("Number of students with Age > 22:", nrow(high_age_subset), "\n")
Number of students with Age > 22: 36
```
- Terminal:** Displays the R session output:
 

```
R > summary(high_age_subset$Age)
Min. 1st Qu. Median Mean 3rd Qu. Max.
23.00 23.00 24.00 23.64 24.00 24.00
```
- Background Jobs:** None listed.
- System Tray:** Shows battery level, signal strength, and system status.

`summary(high_age_subset$Age)`

The screenshot shows the RStudio interface with the following details:

- Project:** (None)
- Environment:** Shows objects: boston, high\_age\_subset, mental, my\_data, Student\_Ment... (101 obs. of 11 variables).
- Files:** Shows files: car\_price\_prediction.csv, Custom Office Templates, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098 P3.R, S098 P4.R, Untitled.R, Student Mental health.csv.
- Console:** Displays the R session output:
 

```
R > summary(high_age_subset$Age)
Min. 1st Qu. Median Mean 3rd Qu. Max.
23.00 23.00 24.00 23.64 24.00 24.00
```
- Terminal:** Displays the R session output:
 

```
R > summary(high_age_subset$Age)
Min. 1st Qu. Median Mean 3rd Qu. Max.
23.00 23.00 24.00 23.64 24.00 24.00
```
- Background Jobs:** None listed.
- System Tray:** Shows battery level, signal strength, and system status.

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```
dep_anx_subset <- subset(mental,
  `Do you have Depression?` == "Yes" &
  `Do you have Anxiety?` == "Yes")
```

The screenshot shows an RStudio interface with several panes:

- Code Editor:** Displays R code for subset operations on datasets like 'mental', 'boston', and 'high\_age\_subset'.
- Console:** Shows the output of the executed code, including summary statistics for 'high\_age\_subset' and 'dep\_anx\_subset'.
- Environment:** Shows the global environment with objects like 'boston', 'dep\_anx\_subset', 'high\_age\_subset', 'my\_data', and 'Student\_Ment...'.
- File Explorer:** Shows files in the current directory, including 'car\_price\_prediction.csv', 'Custom Office Templates', 'Database.txt', 'desktop.ini', 'FlashIntegro', 'My Music', 'My Pictures', 'My Videos', 'S098 P3.R', 'S098 P4.R', 'Untitled.R', and 'Student Mental health.R'.

```
cat("Number of students with both Depression and Anxiety:", nrow(dep_anx_subset), "\n")
```

The screenshot shows the RStudio interface with the following details:

- File Menu:** File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help.
- Toolbar:** Go to file/function, Addins.
- Code Editor:** Contains R code for subset analysis of student mental health data. The code includes filtering by age, depression, anxiety, and both conditions.
- Console:** Displays the output of the executed R code, including summary statistics and subset counts.
- Environment:** Shows the global environment with objects like boston, dep\_anx\_subset, high\_age\_subset, mental, my\_data, and Student\_Ment.
- Files:** Shows the project directory structure with files like car\_price\_prediction.csv, Custom Office Templates, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098 P3.R, S098 P4.R, Untitled.R, and Student Mental health.csv.

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## Subject:-Data Analysis with SAS / SPSS / R

**head(dep\_anx\_subset)**

The screenshot shows the RStudio interface with the code editor containing the following R script:

```

11 cat("Number of students with Age > 22:", nrow(high_age_subset), "\n")
12 summary(high_age_subset$Age)
13
14 dep_anx_subset <- subset(mental,
15   `Do you have Depression?` == "yes" &
16   `Do you have Anxiety?` == "Yes")
17
18 cat("Number of students with both Depression and Anxiety:", nrow(dep_anx_subset), "\n")
19 head(dep_anx_subset)
20
21 panic_or_treated_subset <- subset(mental,
22   `Do you have Panic attack?` == "Yes" |
23   `Did you seek any specialist for a treatment?` == "Yes")
24
25

```

The console output shows:

```

Number of students with both Depression and Anxiety: 18

```

The environment pane lists variables:

- boston
- dep\_anx\_subset
- high\_age\_subset
- mental
- my\_data
- Student\_Ment...

The files pane shows several CSV files and R scripts.

**panic\_or\_treated\_subset <- subset(mental,**  
**'Do you have Panic attack?' == "Yes" |**  
**'Did you seek any specialist for a treatment?' == "Yes")**

The screenshot shows the RStudio interface with the code editor containing the following R script:

```

16 `Do you have Anxiety?` == "Yes")
17
18 cat("Number of students with both Depression and Anxiety:", nrow(dep_anx_subset), "\n")
19 head(dep_anx_subset)
20
21 panic_or_treated_subset <- subset(mental,
22   `Do you have Panic attack?` == "Yes" |
23   `Did you seek any specialist for a treatment?` == "Yes")
24
25 cat("Number of students with Panic attack or who took treatment:", nrow(panic_or_treated_subset), "\n")
26 head(panic_or_treated_subset)
27
28 young_students_filter <- mental |>
29   filter(Age < 20)
30

```

The console output shows:

```

Number of students with both Depression and Anxiety: 18

```

The environment pane lists variables:

- boston
- dep\_anx\_subset
- high\_age\_subset
- mental
- my\_data
- panic\_or\_treated\_subset
- Student\_Ment...

The files pane shows several CSV files and R scripts.

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```
cat("Number of students with Panic attack or who took treatment:", nrow(panic_or_treated_subset),
"\n")
```

The screenshot shows an RStudio interface with the following details:

- File:** S098 P4.R\*
- Code:**

```
16 cat("Number of students with both Depression and Anxiety:", nrow(dep_anx_subset), "\n")
17 head(dep_anx_subset)
18 panic_or_treated_subset <- subset(mental,
19   `Do you have Anxiety?` == "Yes" |
20   `Do you have Panic attack?` == "Yes" |
21   `Did you seek any specialist for a treatment?` == "Yes")
22 cat("Number of students with Panic attack or who took treatment:", nrow(panic_or_treated_subset), "\n")
23 head(panic_or_treated_subset)
24 young_students_filter <- mental |>
25   filter(Age < 20)
26
```
- Console Output:**

```
R > head(panic_or_treated_subset)
#> # A tibble: 6 x 11
#>   Timestamp    "Choose your gender" Age `What is your course?` `Your current year of study` <chr> <chr> <dbl> <chr> <chr>
#> 1 8/7/2020 12:05 Male      19 BIT          19     Year 1
#> 2 8/7/2020 12:52 Female   24 ENM          24     year 4
#> 3 8/7/2020 13:07 Female   18 Marine science 18     year 2
#> 4 8/7/2020 13:17 Female   23 BCS          23     year 3
#> 5 8/7/2020 13:41 Male     18 Engineering 18     year 2
#> 6 8/7/2020 13:58 Female   24 BIT          24     Year 3
#> # i 6 more variables: `What is your CGPA?` <chr>, `Marital status` <chr>,
#> # `Do you have depression?` <chr>, `Do you have Anxiety?` <chr>, `Do you have Panic attack?` <chr>,
#> # `Did you seek any specialist for a treatment?` <chr>
#> > panic_or_treated_subset <- subset(mental,
#>   `Do you have Panic attack?` == "Yes" |
#>   `Did you seek any specialist for a treatment?` == "Yes")
```
- Environment:** Shows various datasets loaded: boston, dep\_anx\_subset, high\_age\_subset, mental, my\_data, panic\_or\_treated\_subset, Student\_Ment.
- File Explorer:** Shows files like car\_price\_prediction.csv, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098 P3.R, S098 P4.R, Untitled.R, and Student Mental health.csv.
- System Tray:** Shows system icons and a message: "Activate Windows Go to Settings to activate Windows".

```
head(panic_or_treated_subset)
```

The screenshot shows an RStudio interface with the following details:

- File:** S098 P4.R\*
- Code:**

```
19 head(panic_or_treated_subset)
20
21 panic_or_treated_subset <- subset(mental,
22   `Do you have Panic attack?` == "Yes" |
23   `Did you seek any specialist for a treatment?` == "Yes")
24
25 cat("Number of students with Panic attack or who took treatment:", nrow(panic_or_treated_subset), "\n")
26 head(panic_or_treated_subset)
27
28 young_students_filter <- mental |>
29   filter(Age < 20)
30
31 cat("Number of students with Age < 20:", nrow(young_students_filter), "\n")
32 summary(young_students_filter$Age)
33
```
- Console Output:**

```
R > head(panic_or_treated_subset)
#> # A tibble: 6 x 11
#>   Timestamp    "Choose your gender" Age `What is your course?` `Your current year of study` <chr> <chr> <dbl> <chr> <chr>
#> 1 8/7/2020 12:02 Female   18 Engineering 18     Year 1
#> 2 8/7/2020 12:05 Male     19 BIT          19     Year 1
#> 3 8/7/2020 12:31 Male     19 Engineering 19     Year 2
#> 4 8/7/2020 12:32 Female   23 Pendidikan islam 23     year 2
#> 5 8/7/2020 12:39 Male     18 Irkhs         18     year 1
#> 6 8/7/2020 12:52 Female   24 ENM          24     year 4
#> # i 6 more variables: `What is your CGPA?` <chr>, `Marital status` <chr>,
#> # `Do you have depression?` <chr>, `Do you have Anxiety?` <chr>, `Do you have Panic attack?` <chr>,
#> # `Did you seek any specialist for a treatment?` <chr>
```
- Environment:** Shows various datasets loaded: boston, dep\_anx\_subset, high\_age\_subset, mental, my\_data, panic\_or\_treated\_subset, Student\_Ment.
- File Explorer:** Shows files like car\_price\_prediction.csv, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098 P3.R, S098 P4.R, Untitled.R, and Student Mental health.csv.
- System Tray:** Shows system icons and a message: "Activate Windows Go to Settings to activate Windows".

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```
young_students_filter <- mental |>  
  filter(Age < 20)
```

The screenshot shows the RStudio interface with the following details:

- Top Bar:** RStudio, File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help.
- Toolbar:** Go to file/function, Addins.
- Code Editor:** Screenshot of a script named "Student\_Mental\_health.R". The code filters students based on panic attacks and age, then prints the count of young students under 20.
- Console:** Displays the output of the R code, including the filtered data frame and its structure.
- Environment:** Shows the global environment with various objects like boston, dep\_anx\_subset, high\_age\_subset, my\_data, panic\_or\_treat, student\_Ment, and young\_studen.
- Files:** A file browser showing local files including car\_price\_prediction.csv, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098.P3.R, S098.P4.R, Untitled.R, and Student Mental health.csv.
- Bottom Status Bar:** 28°C Mostly clear, ENG, 24-11-2025.

```
cat("Number of students with Age < 20:", nrow(young_students_filter), "\n")
```

The screenshot shows the RStudio interface. The top menu bar includes File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help, and Addins. The title bar shows "S098 P3.R" and "S098 P4.R". The left pane contains a script editor with R code related to student mental health. The right pane has tabs for Environment, History, Connections, and Tutorial, with the Environment tab active. It displays a list of global variables and their details. Below the environment list is a file browser showing local files like "car\_price\_prediction.csv" and "Database.txt". The bottom status bar shows system information including temperature, battery level, and network connection.

```
31 Cat("Number of students with Age < 20:", nrow(young_students_filter), "\n")
32 summary(young_students_filter$Age)
33
34 female_dep_filter <- mental |>
35   filter(`Choose your gender` == "Female",
36         `Do you have Depression?` == "Yes")
37
38 cat("Number of Female students with Depression:", nrow(female_dep_filter), "\n")
39 head(female_dep_filter)
40
41 high_cgpa_filter <- mental |>
42   filter(`What is your CGPA?` %in% c("3.00 - 3.49", "3.50 - 4.00"))
43
44 cat("Number of students with high CGPA (>= 3.00):", nrow(high_cgpa_filter), "\n")
45
45 176 (Top Level) +
```

R > R 4.5.2 - ~ ~

```
# A tibble: 6 x 11
#>   Timestamp `Choose your gender` Age `what is your course?` `Your current year of study`
#>   <chr>       <chr>      <dbl> <chr>           <chr>
#> 1 8/7/2020 12:02 Female          18 Engineering     year 1
#> 2 8/7/2020 12:05 Male            19 BIT             Year 1
#> 3 8/7/2020 12:31 Male            19 Engineering     Year 2
#> 4 8/7/2020 12:32 Female         23 Pendidikan islam year 2
#> 5 8/7/2020 12:39 Male            18 Irkhs          year 1
#> 6 8/7/2020 12:52 Female         24 ENM            year 4
#> # i 6 more variables: `What is your CGPA?` <chr>, `Marital status` <chr>,
#> # `Do you have Depression?` <chr>, `Do you have Anxiety?` <chr>, `Do you have Panic attack?` <chr>,
#> # `Did you seek any specialist for a treatment?` <chr>
#> > young_students_filter <- mental |>
#> +   filter(Age < 20)
#> +   cat("Number of students with Age < 20:", nrow(young_students_filter), "\n")
Number of students with Age < 20: 53
|
```

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## Subject:-Data Analysis with SAS / SPSS / R

**summary(young\_students\_filter\$Age)**

RStudio Environment View showing the execution of R code to summarize student data. The code filters students based on age and gender, then prints their details and summary statistics.

```

R - RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
S098 P3.R S098 P4.R Student_Mental_health
Source on Save Run Source
31 cat("Number of students with Age < 20:", nrow(young_students_filter), "\n")
32 summary(young_students_filter$Age)
33
34 female_dep_filter <- mental |>
35 filter(`choose your gender` == "Female",
36 `Do you have Depression?` == "Yes")
37
38 cat("Number of Female students with Depression:", nrow(female_dep_filter), "\n")
39 head(female_dep_filter)
40
41 high_cgpa_filter <- mental |>
42 filter(`what is your CGPA?` %in% c("3.00 - 3.49", "3.50 - 4.00"))
43
44 cat("Number of students with high CGPA (>= 3.00):", nrow(high_cgpa_filter), "\n")
45
45: [Top Level] R Script

```

Console Terminal Background Jobs

```

R - R 4.5.2 ~/ ~
1 8/7/2020 12:02 Female 18 Engineering year 1
2 8/7/2020 12:05 Male 19 BIT year 1
3 8/7/2020 12:31 Male 19 Engineering year 2
4 8/7/2020 12:32 Female 23 Pendidikan islam year 2
5 8/7/2020 12:39 Male 18 Irkhs year 1
6 8/7/2020 12:52 Female 24 ENM year 4
# i 6 more variables: `what is your CGPA?` <chr>, `Marital status` <chr>,
# `Do you have Depression?` <chr>, `do you have Anxiety?` <chr>, `Do you have Panic attack?` <chr>,
# `Did you seek any specialist for a treatment?` <chr>
> young_students_filter <- mental |>
+ filter(Age < 20)
> cat("Number of students with Age < 20:", nrow(young_students_filter), "\n")
Number of students with Age < 20: 53
> summary(young_students_filter$Age)
 Min. 1st Qu. Median Mean 3rd Qu. Max.
 18.0 18.0 18.0 18.4 19.0 19.0
> 

```

Environment History Connections Tutorial Project: (None)

Files Plots Packages Help Viewer Presentation

Home Name Size Modified

- car\_price\_prediction.csv 156.3 KB Nov 18, 2025, 6:52 PM
- Custom Office Templates
- Database.txt 102 B Oct 30, 2025, 8:34 PM
- desktop.ini 402 B Oct 27, 2025, 3:01 PM
- FlashIntegro
- My Music
- My Pictures
- My Videos
- S098 P3.R 333 B Nov 24, 2025, 6:13 PM
- S098 P4.R 0 B Nov 24, 2025, 6:23 PM
- Untitled.R 39 B Nov 24, 2025, 5:54 PM
- Student Mental health.csv 7.2 KB Nov 18, 2025, 7:22 PM

Activate Windows Go to Settings to activate Windows.

28°C Mostly clear 07:15 PM ENG 24-11-2025

**female\_dep\_filter <- mental |>**  
**filter(`Choose your gender` == "Female",**  
**`Do you have Depression?` == "Yes")**

RStudio Environment View showing the execution of R code to filter female students with depression. The code filters students based on gender and depression status, then prints their details and summary statistics.

```

R - RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
S098 P3.R S098 P4.R Student_Mental_health
Source on Save Run Source
31 cat("Number of students with Age < 20:", nrow(young_students_filter), "\n")
32 summary(young_students_filter$Age)
33
34 female_dep_filter <- mental |>
35 filter(`choose your gender` == "Female",
36 `Do you have Depression?` == "Yes")
37
38 cat("Number of Female students with Depression:", nrow(female_dep_filter), "\n")
39 head(female_dep_filter)
40
41 high_cgpa_filter <- mental |>
42 filter(`what is your CGPA?` %in% c("3.00 - 3.49", "3.50 - 4.00"))
43
44 cat("Number of students with high CGPA (>= 3.00):", nrow(high_cgpa_filter), "\n")
45
45: [Top Level] R Script

```

Console Terminal Background Jobs

```

R - R 4.5.2 ~/ ~
4 8/7/2020 12:32 Female 23 Pendidikan islam year 2
5 8/7/2020 12:39 Male 18 Irkhs year 1
6 8/7/2020 12:52 Female 24 ENM year 4
# i 6 more variables: `what is your CGPA?` <chr>, `Marital status` <chr>,
# `Do you have Depression?` <chr>, `do you have Anxiety?` <chr>, `Do you have Panic attack?` <chr>,
# `Did you seek any specialist for a treatment?` <chr>
> young_students_filter <- mental |>
+ filter(Age < 20)
> cat("Number of students with Age < 20:", nrow(young_students_filter), "\n")
Number of students with Age < 20: 53
> summary(young_students_filter$Age)
 Min. 1st Qu. Median Mean 3rd Qu. Max.
 18.0 18.0 18.0 18.4 19.0 19.0
> female_dep_filter <- mental |>
+ filter(`choose your gender` == "Female",
+ `Do you have Depression?` == "Yes")
> 

```

Environment History Connections Tutorial Project: (None)

Files Plots Packages Help Viewer Presentation

Home Name Size Modified

- car\_price\_prediction.csv 156.3 KB Nov 18, 2025, 6:52 PM
- Custom Office Templates
- Database.txt 102 B Oct 30, 2025, 8:34 PM
- desktop.ini 402 B Oct 27, 2025, 3:01 PM
- FlashIntegro
- My Music
- My Pictures
- My Videos
- S098 P3.R 333 B Nov 24, 2025, 6:13 PM
- S098 P4.R 0 B Nov 24, 2025, 6:23 PM
- Untitled.R 39 B Nov 24, 2025, 5:54 PM
- Student Mental health.csv 7.2 KB Nov 18, 2025, 7:22 PM

Activate Windows Go to Settings to activate Windows.

28°C Mostly clear 07:15 PM ENG 24-11-2025

# MVLU COLLEGE

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```
cat("Number of Female students with Depression:", nrow(female_dep_filter), "\n")
```

The screenshot shows the RStudio interface with the following details:

- Project:** MVLU COLLEGE
- Environment:** Global Environment
- Files:** car\_price\_prediction.csv, Custom Office Templates, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098 P3.R, S098 P4.R, Untitled.R, Student Mental health.csv
- Console Output:**

```
R > R 4.5.2 . ~/ ~
0 8/7/2020 12:52 Female 24 ENM year 4
# I 6 more variables: 'what is your CGPA?' <chr>, 'Marital status' <chr>,
# 'Do you have Depression?' <chr>, 'do you have Anxiety?' <chr>, 'Do you have Panic attack?' <chr>,
> young_students_filter <- mental |>
+ filter(Age < 20)
> cat("Number of students with Age < 20:", nrow(young_students_filter), "\n")
Number of students with Age < 20: 53
> summary(young_students_filter$age)
   Min. 1st Qu. Median 3rd Qu. Max.
18.0    18.0   18.4    19.0   19.0
> female_dep_filter <- mental |>
+ filter('choose your gender' == "Female",
+ 'do you have Depression?' == "Yes")
> cat("Number of Female students with Depression:", nrow(female_dep_filter), "\n")
Number of Female students with Depression: 29
> |
```
- System Status:** 28°C Mostly clear, ENG, 07:17 PM, 24-11-2025

```
head(female_dep_filter)
```

The screenshot shows the RStudio interface with the following details:

- Project:** MVLU COLLEGE
- Environment:** Global Environment
- Files:** car\_price\_prediction.csv, Custom Office Templates, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098 P3.R, S098 P4.R, Untitled.R, Student Mental health.csv
- Console Output:**

```
R > R 4.5.2 . ~/ ~
+ 'do you have Depression?' == "Yes")
> cat("Number of Female students with Depression:", nrow(female_dep_filter), "\n")
Number of Female students with Depression: 29
> head(female_dep_filter)
# A tibble: 6 x 11
#> #>   'choose your gender' `Age` 'what is your course?' `Your current year of study'
#> #>   <chr>     <dbl> <chr>           <chr>
1 8/7/2020 12:02 Female      18 Engineering    year 1
2 8/7/2020 12:06 Female      22 Laws          year 3
3 8/7/2020 12:32 Female      23 Pendidikan islam year 2
4 8/7/2020 12:39 Female      24 Engineering    Year 3
5 8/7/2020 12:40 Female      18 BCS           year 1
6 8/7/2020 12:52 Female      24 ENM           year 4
# I 6 more variables: 'what is your CGPA?' <chr>, 'Marital status' <chr>,
# 'Do you have Depression?' <chr>, 'do you have Anxiety?' <chr>, 'Do you have Panic attack?' <chr>,
# 'Did you seek any specialist for a treatment?' <chr>
```
- System Status:** 28°C Mostly clear, ENG, 07:17 PM, 24-11-2025

# MVLU COLLEGE

## Subject:-Data Analysis with SAS / SPSS / R

**high\_cgpa\_filter <- mental |>**

```
filter(`What is your CGPA?` %in% c("3.00 - 3.49", "3.50 - 4.00"))
```

The screenshot shows the RStudio interface with the following code in the script pane:

```

31 cat("Number of students with Age < 20:", nrow(young_students_filter), "\n")
32 summary(young_students_filter$Age)
33
34 female_dep_filter <- mental |>
35   filter(`choose your gender` == "Female",
36         `Do you have Depression?` == "Yes")
37
38 cat("Number of Female students with Depression:", nrow(female_dep_filter), "\n")
39 head(female_dep_filter)
40
41 high_cgpa_filter <- mental |>
42   filter(`what is your CGPA?` %in% c("3.00 - 3.49", "3.50 - 4.00"))
43
44 cat("Number of students with high CGPA (>= 3.00):", nrow(high_cgpa_filter), "\n")
45

```

The console pane shows the output of the command `head(female_dep_filter)`:

```

> head(female_dep_filter)
# A tibble: 6 × 11
  Timestamp `Choose your gender` Age `What is your course?` `Your current year of study` 
  <chr>      <chr>       <dbl> <chr>           <chr> 
1 8/7/2020 12:02 Female          18 Engineering     year 1  
2 8/7/2020 12:06 Female          22 Laws            year 3  
3 8/7/2020 12:32 Female          23 Pendidikan islam year 2  
4 8/7/2020 12:39 Female          24 Engineering     Year 3  
5 8/7/2020 12:40 Female          18 BCS             year 1  
6 8/7/2020 12:52 Female          24 ENM             year 4  
# i 6 more variables: `what is your CGPA?` <chr>, `Marital status` <chr>,
# `Do you have Depression?` <chr>, `Do you have Anxiety?` <chr>, `Do you have Panic attack?` <chr>,
# `Did you seek any specialist for a treatment?` <chr>
> high_cgpa_filter <- mental |>
+   filter(`what is your CGPA?` %in% c("3.00 - 3.49", "3.50 - 4.00"))
> 
```

The environment pane shows various datasets loaded, including `high_cgpa_filter` (91 obs. of 11 variables).

**cat("Number of students with high CGPA (>= 3.00):", nrow(high\_cgpa\_filter), "\n")**

The screenshot shows the RStudio interface with the following code in the script pane:

```

33
34 female_dep_filter <- mental |>
35   filter(`choose your gender` == "Female",
36         `Do you have Depression?` == "Yes")
37
38 cat("Number of Female students with Depression:", nrow(female_dep_filter), "\n")
39 head(female_dep_filter)
40
41 high_cgpa_filter <- mental |>
42   filter(`what is your CGPA?` %in% c("3.00 - 3.49", "3.50 - 4.00"))
43
44 cat("Number of students with high CGPA (>= 3.00):", nrow(high_cgpa_filter), "\n")
45 table(high_cgpa_filter$`what is your CGPA?`)
46

```

The console pane shows the output of the command `table(high_cgpa_filter$`what is your CGPA?`)`:

```

> table(high_cgpa_filter$`what is your CGPA?`)
Number of students with high CGPA (>= 3.00): 91
> 
```

The environment pane shows various datasets loaded, including `high_cgpa_filter` (91 obs. of 11 variables).

# MVLU COLLEGE

## Subject:-Data Analysis with SAS / SPSS / R

table(high\_cgpa\_filter\$`What is your CGPA?`)

The screenshot shows the RStudio interface with the following details:

- Environment View:** Shows various datasets loaded: remale\_dep\_T\_ (29 obs. or 11 variables), high\_age\_sub\_ (36 obs. of 11 variables), high\_cgpa\_fi\_ (91 obs. of 11 variables), mental (101 obs. of 11 variables), my\_data (2500 obs. of 10 variables), panic\_or\_tre\_ (35 obs. of 11 variables), student\_Ment\_ (101 obs. of 11 variables), and young\_studen\_ (53 obs. of 11 variables).
- Console View:** Displays the R script and its output. The script filters data based on gender and depression status, then counts students with high CGPA ( $\geq 3.00$ ). The output shows 91 students with high CGPA.
- File Explorer:** Shows the file structure including car\_price\_prediction.csv, Custom Office Templates, Database.txt, desktop.ini, FlashIntegro, My Music, My Pictures, My Videos, S098 P3.R, S098 P4.R, Untitled.R, and Student Mental health.csv.
- System Tray:** Shows system information like temperature (28°C), battery level, and date/time (24-11-2025, 07:19 PM).

```
R> female_dep_filter <- mental |>
  filter(`choose your gender` == "Female",
  `do you have Depression?` == "Yes")
R> cat("Number of Female students with Depression:", nrow(female_dep_filter), "\n")
R> head(female_dep_filter)
R> 
R> high_cgpa_filter <- mental |>
  filter(`What is your CGPA?` %in% c("3.00 - 3.49", "3.50 - 4.00"))
R> cat("Number of students with high CGPA (>= 3.00):", nrow(high_cgpa_filter), "\n")
R> table(high_cgpa_filter$`What is your CGPA?`)
R> 
R> 3.00 - 3.49 3.50 - 4.00
R> 43          48
R> |
```