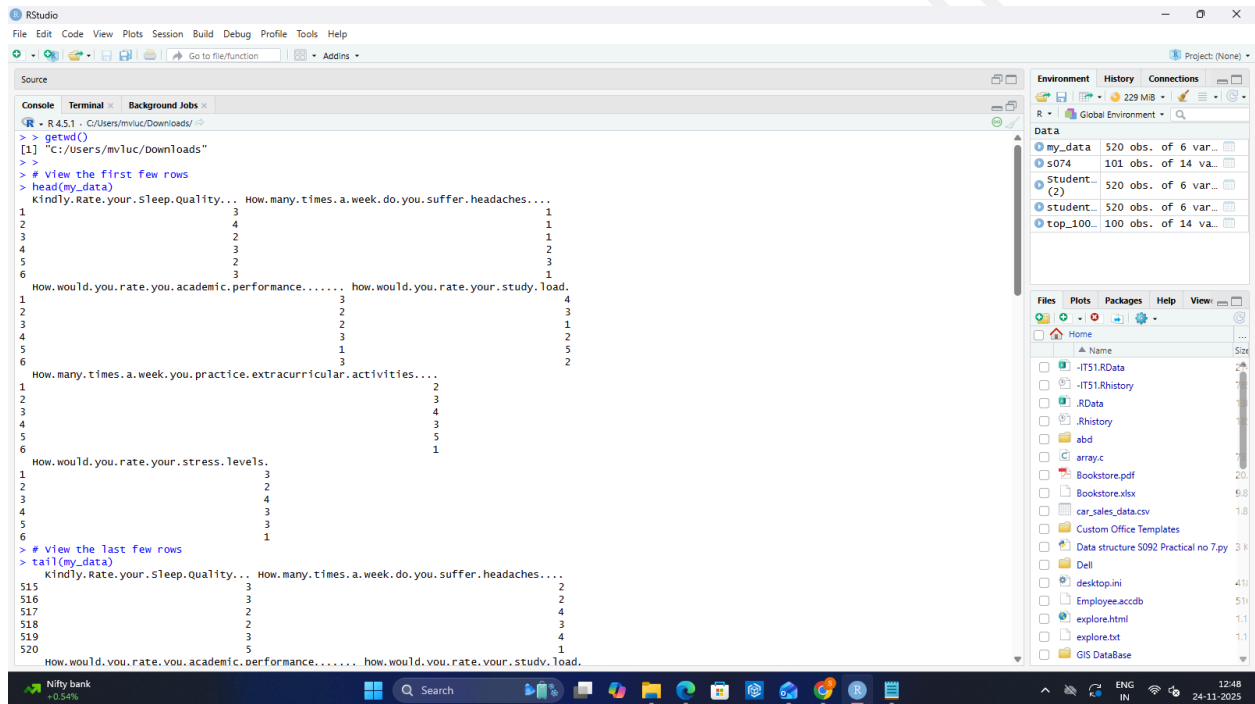


**SHETH L.U.J AND SIR M.V. COLLEGE**  
**SUBJECT NAME: DATA ANALYSIS WITH SAS/SPSS/R**

**Module 1 Practical 3**

**Aim:** Exploring data: View() or print() (R).

**OUTPUT:**



The screenshot shows the RStudio interface with the following content:

```
R - R 4.5.1 - C:/Users/mvluc/Downloads/
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function Addins

Source
Console Terminal Background Jobs
R - R 4.5.1 - C:/Users/mvluc/Downloads/
> > getwd()
[1] "C:/Users/mvluc/downloads"
> >
> # view the first few rows
> head(my_data)
  kindly.rate.your.sleep.quality... how.many.times.a.week.do.you.suffer.headaches...
1                                3                                1
2                                4                                1
3                                2                                1
4                                3                                2
5                                2                                3
6                                3                                1
  how.would.you.rate.you.academic.performance..... how.would.you.rate.your.study.load.
1                                3                                4
2                                2                                3
3                                2                                1
4                                3                                2
5                                1                                5
6                                3                                2
  how.many.times.a.week.you.practice.extracurricular.activities...
1                                2
2                                3
3                                4
4                                3
5                                5
6                                1
  how.would.you.rate.your.stress.levels.
1                                3
2                                2
3                                4
4                                3
5                                3
6                                1

> # view the last few rows
> tail(my_data)
  kindly.rate.your.sleep.quality... how.many.times.a.week.do.you.suffer.headaches...
515                                3                                2
516                                3                                2
517                                2                                4
518                                2                                3
519                                3                                4
520                                5                                1
  how.would.you.rate.you.academic.performance..... how.would.you.rate.your.study.load.
515                                3                                4
516                                2                                3
517                                2                                1
518                                3                                5
519                                3                                2
520                                1                                4
```

The Environment pane on the right shows the following data objects:

Object	Size
my_data	520 obs. of 6 var...
s074	101 obs. of 14 va...
Student...	520 obs. of 6 var...
Student...	520 obs. of 6 var...
top_100...	100 obs. of 14 va...

The Files pane on the right shows the following files:

File	Size
-ITS1.RData	...
-ITS1.Rhistory	...
.RData	...
.Rhistory	...
abd	...
array.c	...
Bookstore.pdf	20...
Bookstore.xlsx	5.8...
car_sales_data.csv	7.8...
Custom Office Templates	...
Data structure 5092 Practical no 7.py	3 k...
Dell	...
desktop.ini	41...
Employee.accdb	51...
explore.html	1.1...
explore.txt	1.1...
GIS DataBase	...

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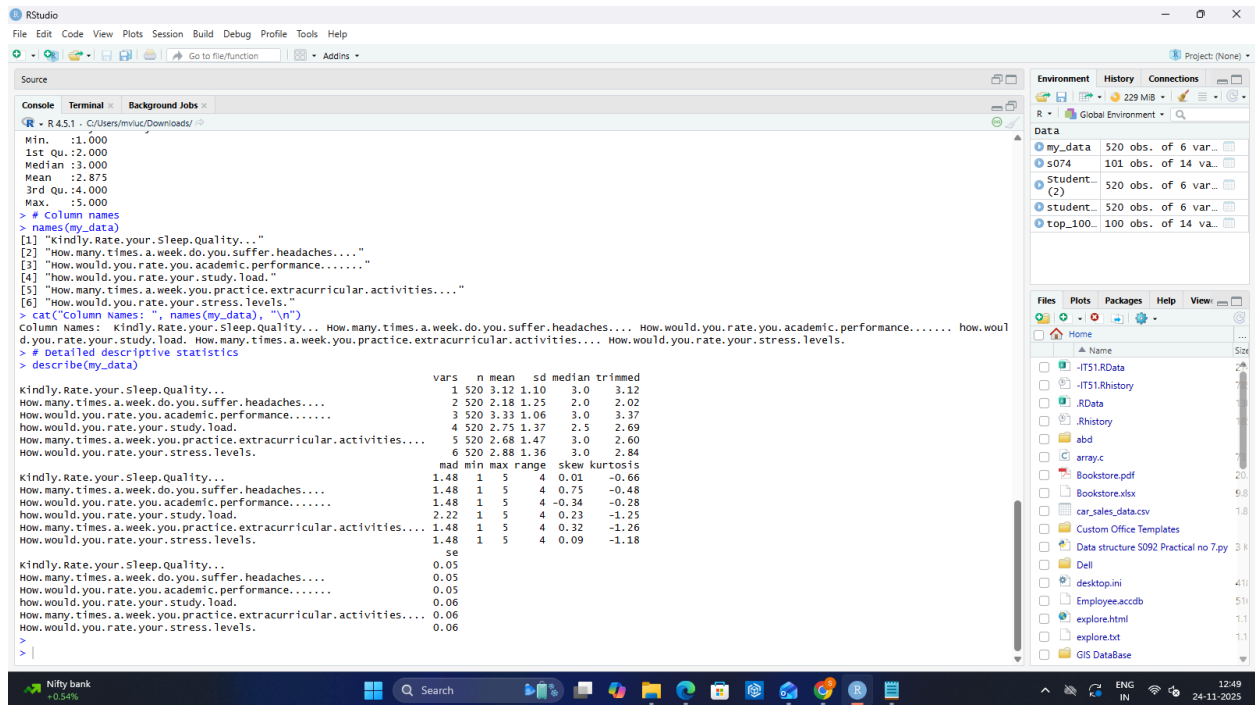
## SUBJECT NAME: DATA ANALYSIS WITH SAS/SPSS/R

```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function Addins
Source
Console Terminal Background Jobs
R - R 4.5.1 - C:/Users/mvuc/Downloads/
516 4 2
517 3 2
518 5 1
519 3 5
520 5 5
How.many.times.a.week.you.practice.extracurricular.activities....
515 4
516 3
517 1
518 5
519 2
520 5
How.would.you.rate.your.stress.levels.
515 3
516 1
517 2
518 2
519 5
520 4
> # Get the dimensions (rows and columns)
> dim(my_data)
[1] 520 6
> cat("Dimensions (Rows, columns): ", dim(my_data), "\n")
Dimensions (Rows, columns): 520 6
> # Check structure (types of variables)
> str(my_data)
'data.frame': 520 obs. of 6 variables:
 $ kindly.rate.your.sleep.quality... : int 3 4 2 3 2 3 3 4 2 1 ...
 $ How.many.times.a.week.do.you.suffer.headaches.... : int 1 1 1 2 3 1 5 3 1 2 ...
 $ How.would.you.rate.you.academic.performance..... : int 3 2 2 3 1 3 1 1 4 3 ...
 $ how.would.you.rate.your.study.load. : int 4 3 1 2 5 2 4 4 4 2 ...
 $ How.many.times.a.week.you.practice.extracurricular.activities.... : int 2 3 4 3 5 1 3 1 5 5 ...
 $ How.would.you.rate.your.stress.levels. : int 3 2 4 3 3 1 5 1 1 2 ...
> # Summary of dataset
> summary(my_data)
kindly.rate.your.sleep.quality... How.many.times.a.week.do.you.suffer.headaches....
Min. :1.000 Min. :1.000
1st Qu.:2.000 1st Qu.:1.000
Median :3.000 Median :2.000
Mean :3.125 Mean :2.183
3rd Qu.:4.000 3rd Qu.:3.000
Max. :5.000 Max. :5.000
How.would.you.rate.your.stress.levels. how.would.you.rate.your.study.load
Min. :1.000 Min. :1.000
1st Qu.:2.000 1st Qu.:1.000
Median :3.000 Median :2.000
Mean :2.683 Mean :2.183
3rd Qu.:4.000 3rd Qu.:3.000
Max. :5.000 Max. :5.000
```

```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function Addins
Source
Console Terminal Background Jobs
R - R 4.5.1 - C:/Users/mvuc/Downloads/
1st Qu.:3.000 1st Qu.:2.00
Median :3.000 Median :2.50
Mean :3.327 Mean :2.75
3rd Qu.:4.000 3rd Qu.:4.00
Max. :5.000 Max. :5.000
How.many.times.a.week.you.practice.extracurricular.activities....
Min. :1.000
1st Qu.:1.000
Median :3.000
Mean :2.683
3rd Qu.:4.000
Max. :5.000
How.would.you.rate.your.stress.levels.
Min. :1.000
1st Qu.:2.000
Median :3.000
Mean :2.875
3rd Qu.:4.000
Max. :5.000
> # Column names
> names(my_data)
[1] "kindly.rate.your.sleep.quality..."
[2] "How.many.times.a.week.do.you.suffer.headaches...."
[3] "How.would.you.rate.you.academic.performance....."
[4] "how.would.you.rate.your.study.load."
[5] "How.many.times.a.week.you.practice.extracurricular.activities...."
[6] "How.would.you.rate.your.stress.levels."
> cat("Column Names: ", names(my_data), "\n")
Column Names: kindly.rate.your.sleep.quality... How.many.times.a.week.do.you.suffer.headaches.... How.would.you.rate.you.academic.performance..... how.would.you.rate.your.study.load. How.many.times.a.week.you.practice.extracurricular.activities.... How.would.you.rate.your.stress.levels.
> # Detailed descriptive statistics
> describe(my_data)
vars n mean sd median trimmed
kindly.rate.your.sleep.quality... 1 520 3.12 1.10 3.0 3.12
How.many.times.a.week.do.you.suffer.headaches.... 2 520 2.18 1.25 2.0 2.02
How.would.you.rate.you.academic.performance..... 3 520 3.33 1.06 3.0 3.37
how.would.you.rate.your.study.load. 4 520 2.75 1.37 2.5 2.69
How.many.times.a.week.you.practice.extracurricular.activities.... 5 520 2.68 1.47 3.0 2.60
How.would.you.rate.your.stress.levels. 6 520 2.88 1.36 3.0 2.84
mad min max range skew kurtosis
kindly.rate.your.sleep.quality... 1.48 1 5 4 0.01 -0.66
How.many.times.a.week.do.you.suffer.headaches.... 1.48 1 5 4 0.75 -0.48
```

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The screenshot displays the RStudio environment with the following components:

- Console:** Shows the execution of R commands and their output. The commands include: `min`, `1st Qu.`, `Median`, `Mean`, `3rd Qu.`, `Max.`, `> # Column names`, `> names(my_data)`, `> cat("Column Names: ", names(my_data), "\n")`, `> # Detailed descriptive statistics`, and `> describe(my_data)`. The output provides summary statistics for six variables: `Kindly.Rate.your.Sleep.Quality...`, `How.many.times.a.week.do.you.suffer.headaches...`, `How.would.you.rate.you.academic.performance.....`, `How.would.you.rate.your.study.load.`, `How.many.times.a.week.you.practice.extracurricular.activities....`, and `How.would.you.rate.your.stress.levels.`. The `describe` function output includes measures such as `vars`, `n`, `mean`, `sd`, `median`, `trimmed`, `mad`, `min`, `max`, `range`, `skew`, `kurtosis`, and `se`.
- Environment:** Lists the objects in the R environment, including `my_data` (520 obs. of 6 var...), `s074` (101 obs. of 14 va...), `Student...` (520 obs. of 6 var...), `student...` (520 obs. of 6 var...), and `top_100...` (100 obs. of 14 va...).
- Files:** Shows the file explorer with various files and folders, including `Home`, `IT51.RData`, `IT51.Rhistory`, `RData`, `Rhistory`, `abd`, `array.c`, `Bookstore.pdf`, `Bookstore.xlsx`, `car_sales_data.csv`, `Custom Office Templates`, `Data structure 5092 Practical no 7.py`, `Dell`, `desktop.ini`, `Employee.accdb`, `explore.html`, `explore.txt`, and `GIS DataBase`.