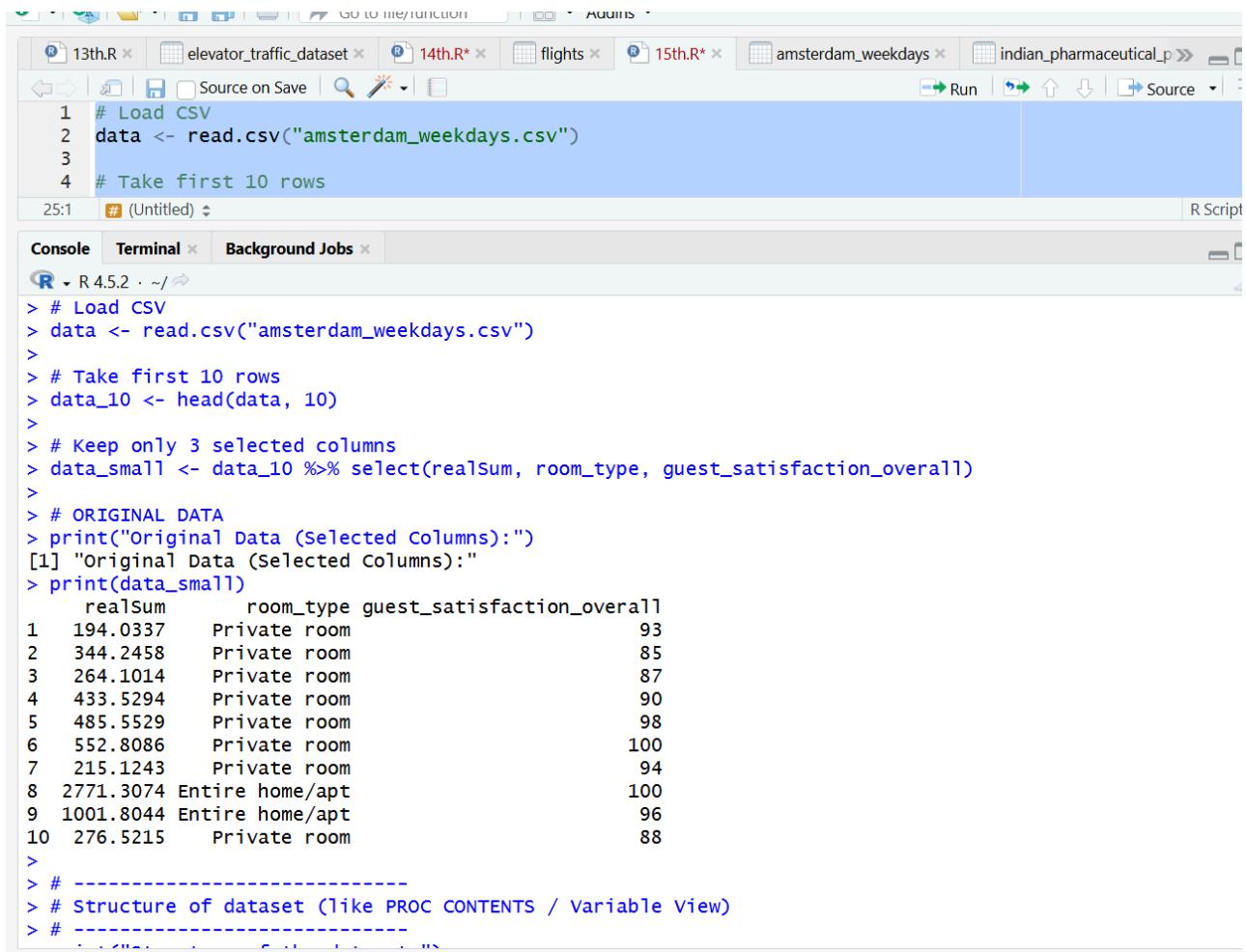


Sheth I.u.j. And sir m.v. college of arts science and commerce

Practical no.15th

Aim: 15Generating basic summaries using PROC CONTENTS (SAS), Variable View (SPSS), and str() or summary() (R).



The screenshot shows an RStudio interface. The top bar has tabs for various files like '13th.R', 'elevator_traffic_dataset', '14th.R*', 'flights', '15th.R*', 'amsterdam_weekdays', 'indian_pharmaceutical_p'. Below the tabs is a toolbar with icons for file operations. The main area has two panes: the left pane shows R code, and the right pane shows the output of the code. The code reads a CSV file 'amsterdam_weekdays.csv', takes the first 10 rows, and prints the first 10 rows of the selected columns (realsum, room_type, guest_satisfaction_overall). The output shows 10 rows of data.

```
# Load CSV
data <- read.csv("amsterdam_weekdays.csv")
# Take first 10 rows
data_10 <- head(data, 10)
# Keep only 3 selected columns
data_small <- data_10 %>% select(realsum, room_type, guest_satisfaction_overall)
# ORIGINAL DATA
print("Original Data (Selected Columns):")
[1] "Original Data (Selected Columns):"
print(data_small)
  realsum    room_type guest_satisfaction_overall
1 194.0337 Private room          93
2 344.2458 Private room          85
3 264.1014 Private room          87
4 433.5294 Private room          90
5 485.5529 Private room          98
6 552.8086 Private room         100
7 215.1243 Private room          94
8 2771.3074 Entire home/apt     100
9 1001.8044 Entire home/apt     96
10 276.5215 Private room         88
# -----
# Structure of dataset (like PROC CONTENTS / Variable View)
# -----
```

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File Edit Code View Plots Session Build Debug Profile Tools Help

The screenshot shows the RStudio interface. The top menu bar includes File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, and Help. The top toolbar has icons for file operations like Open, Save, and Run. The left sidebar shows a list of open files: 13th.R, elevator_traffic_dataset, 14th.R*, flights, 15th.R*, amsterdam_weekdays, indian_pharmaceutical_p. The right sidebar shows the Environment browser with objects like Data, amste, data, data_, data_, dupli, long_, oricai. The main workspace shows R code being run in the console:

```
1 # Load CSV
2 data <- read.csv("amsterdam_weekdays.csv")
3
4 # Take first 10 rows
5
6 # (Untitled) 25:1
```

Output from the console:

```
R 4.5.2 · ~/ ...
9 1001.8044 Entire home/apt 96
10 276.5215 Private room 88
>
> # -----
> # Structure of dataset (like PROC CONTENTS / Variable View)
> # -----
> print("Structure of the dataset:")
[1] "Structure of the dataset:"
> str(data_small)
'data.frame': 10 obs. of 3 variables:
 $ realSum : num 194 344 264 434 486 ...
 $ room_type: chr "Private room" "Private room" "Private room" ...
 $ guest_satisfaction_overall: num 93 85 87 90 98 100 94 100 96 88
>
> # -----
> # Summary statistics (like PROC SUMMARY / DESCRIPTIVES)
> # -----
> print("Summary statistics of the dataset:")
[1] "Summary statistics of the dataset:"
> summary(data_small)
   realSum      room_type     guest_satisfaction_overall
Min. :194.0  Length:10    Min. :85.0
1st Qu.:267.2  Class :character 1st Qu.:88.5
Median :388.9  Mode  :character Median :93.5
Mean   :653.9                    Mean   :93.1
3rd Qu.:536.0                    3rd Qu.:97.5
Max.  :2771.3                   Max.  :100.0
```