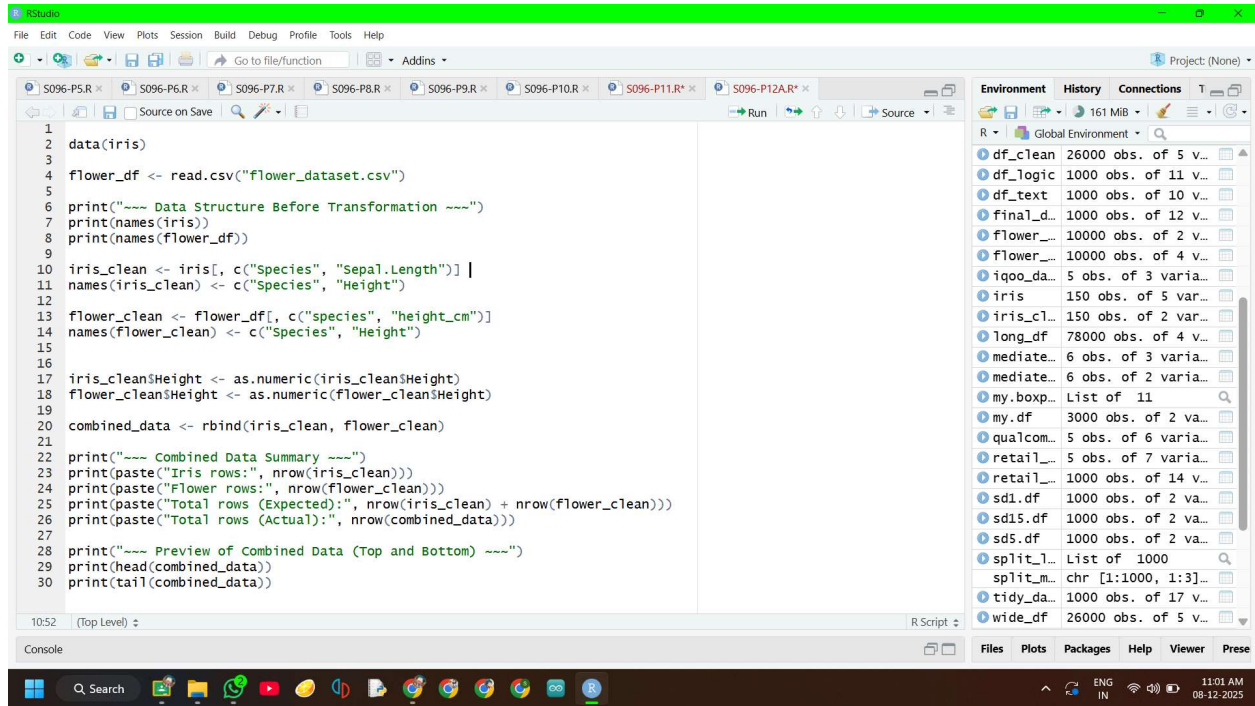


SHETH L.U.J. AND SIR M.V. COLLEGE
DATA ANALYSIS WITH SAS/SPSS/R

PRACTICAL NO: 12

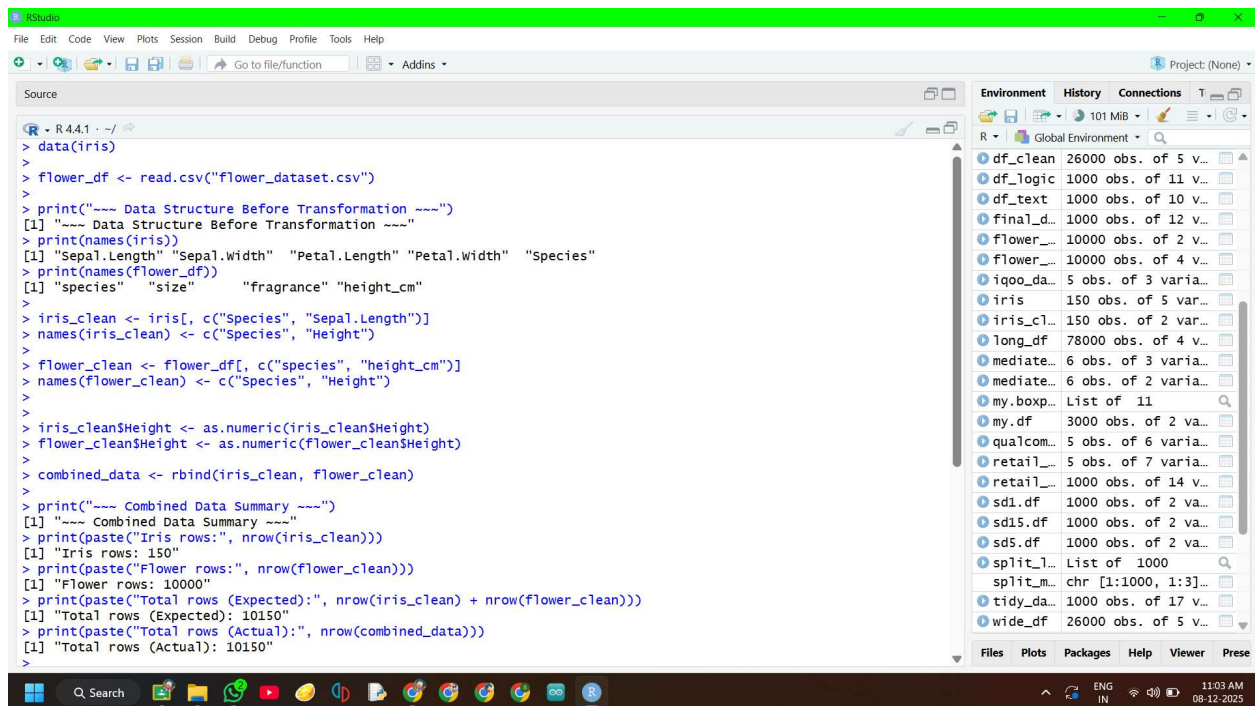
AIM:Combining datasets vertically (concatenation) using rbind() (R).

CODE:



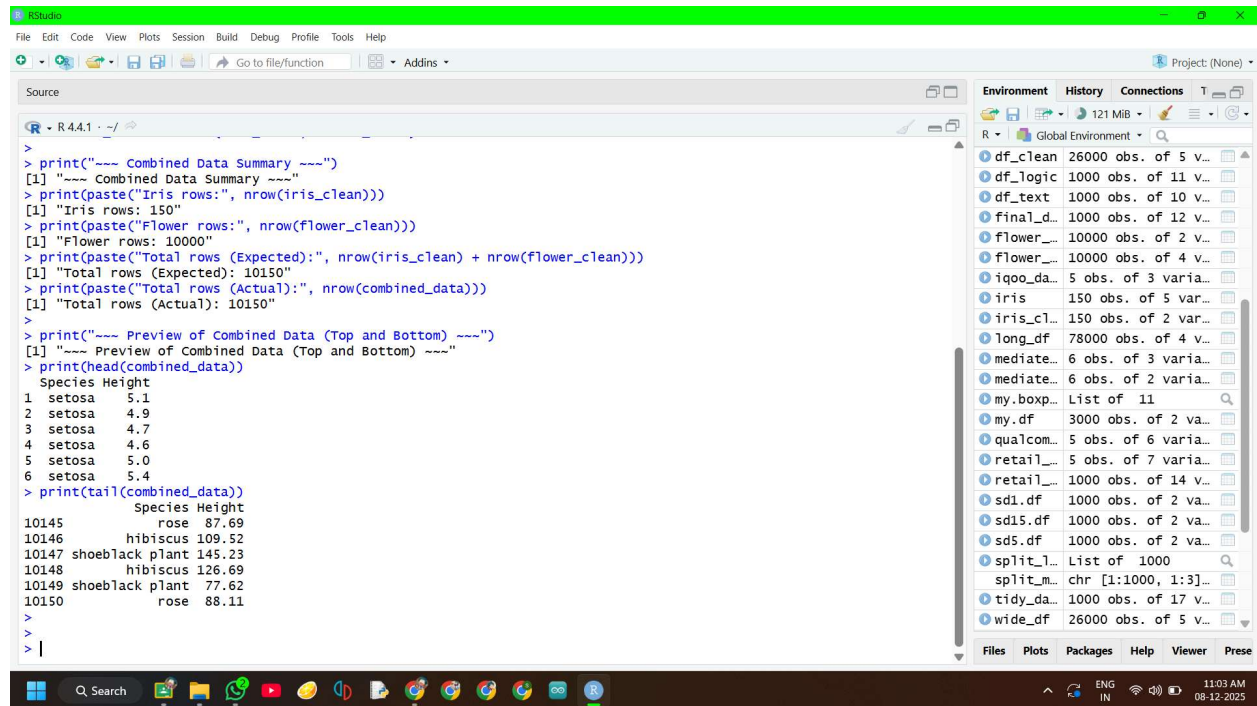
```
1 data(iris)
2
3
4 flower_df <- read.csv("flower_dataset.csv")
5
6 print("~~~ Data Structure Before Transformation ~~~")
7 print(names(iris))
8 print(names(flower_df))
9
10 iris_clean <- iris[, c("Species", "Sepal.Length")] |
11 names(iris_clean) <- c("Species", "Height")
12
13 flower_clean <- flower_df[, c("species", "height_cm")]
14 names(flower_clean) <- c("Species", "Height")
15
16
17 iris_clean$Height <- as.numeric(iris_clean$Height)
18 flower_clean$Height <- as.numeric(flower_clean$Height)
19
20 combined_data <- rbind(iris_clean, flower_clean)
21
22 print("~~~ Combined Data Summary ~~~")
23 print(paste("Iris rows:", nrow(iris_clean)))
24 print(paste("Flower rows:", nrow(flower_clean)))
25 print(paste("Total rows (Expected):", nrow(iris_clean) + nrow(flower_clean)))
26 print(paste("Total rows (Actual):", nrow(combined_data)))
27
28 print("~~~ Preview of Combined Data (Top and Bottom) ~~~")
29 print(head(combined_data))
30 print(tail(combined_data))
```

OUTPUT:



```
> data(iris)
> flower_df <- read.csv("flower_dataset.csv")
> print("~~~ Data Structure Before Transformation ~~~")
[1] "~~~ Data Structure Before Transformation ~~~"
> print(names(iris))
[1] "Sepal.Length" "Sepal.Width" "Petal.Length" "Petal.Width" "Species"
> print(names(flower_df))
[1] "species" "size" "fragrance" "height_cm"
> iris_clean <- iris[, c("Species", "Sepal.Length")]
> names(iris_clean) <- c("Species", "Height")
>
> flower_clean <- flower_df[, c("species", "height_cm")]
> names(flower_clean) <- c("Species", "Height")
>
> iris_clean$Height <- as.numeric(iris_clean$Height)
> flower_clean$Height <- as.numeric(flower_clean$Height)
>
> combined_data <- rbind(iris_clean, flower_clean)
>
> print("~~~ Combined Data Summary ~~~")
[1] "~~~ Combined Data Summary ~~~"
> print(paste("Iris rows:", nrow(iris_clean)))
[1] "Iris rows: 150"
> print(paste("Flower rows:", nrow(flower_clean)))
[1] "Flower rows: 10000"
> print(paste("Total rows (Expected):", nrow(iris_clean) + nrow(flower_clean)))
[1] "Total rows (Expected): 10150"
> print(paste("Total rows (Actual):", nrow(combined_data)))
[1] "Total rows (Actual): 10150"
>
```

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



The screenshot displays the RStudio environment. The Source pane on the left contains R code for data summarization and preview. The Environment pane on the right lists various data frames and their dimensions. The console at the bottom shows the output of the executed code.

```
> print("~~~ Combined Data Summary ~~~")
[1] "~~~ Combined Data Summary ~~~"
> print(paste("Iris rows:", nrow(iris_clean)))
[1] "Iris rows: 150"
> print(paste("Flower rows:", nrow(flower_clean)))
[1] "Flower rows: 10000"
> print(paste("Total rows (Expected):", nrow(iris_clean) + nrow(flower_clean)))
[1] "Total rows (Expected): 10150"
> print(paste("Total rows (Actual):", nrow(combined_data)))
[1] "Total rows (Actual): 10150"
>
> print("~~~ Preview of Combined Data (Top and Bottom) ~~~")
[1] "~~~ Preview of Combined Data (Top and Bottom) ~~~"
> print(head(combined_data))
  Species Height
1  setosa    5.1
2  setosa    4.9
3  setosa    4.7
4  setosa    4.6
5  setosa    5.0
6  setosa    5.4
> print(tail(combined_data))
  Species Height
10145    rose  87.69
10146 hibiscus 109.52
10147 shoeblack plant 145.23
10148    hibiscus 126.69
10149 shoeblack plant  77.62
10150    rose   88.11
>
>
> |
```

Environment Pane:

Object	Dimensions
df_clean	26000 obs. of 5 v...
df_logic	1000 obs. of 11 v...
df_text	1000 obs. of 10 v...
final_d...	1000 obs. of 12 v...
flower_...	10000 obs. of 2 v...
flower_...	10000 obs. of 4 v...
iqoo_da...	5 obs. of 3 varia...
iris	150 obs. of 5 var...
iris_cl...	150 obs. of 2 var...
long_df	78000 obs. of 4 v...
mediate...	6 obs. of 3 varia...
mediate...	6 obs. of 2 varia...
my.bosp...	List of 11
my.df	3000 obs. of 2 va...
qualcom...	5 obs. of 6 varia...
retail_...	5 obs. of 7 varia...
retail_...	1000 obs. of 14 v...
sd1.df	1000 obs. of 2 va...
sd15.df	1000 obs. of 2 va...
sd5.df	1000 obs. of 2 va...
split_1...	List of 1000
split_m...	chr [1:1000, 1:3]...
tidy_da...	1000 obs. of 17 v...
wide_df	26000 obs. of 5 v...

System Tray: 11:03 AM, 08-12-2025

