

# **SHETH L.U.J. AND SIR M.V. COLLEGE**

## **SUBJECT:Data Analysis with R**

Aim: Combining and appending datasets using `merge()` or `bind_rows()` in R.

The screenshot shows a dual-panel interface of RStudio. The left panel displays the R console session for 'S103 6th practical.R', which includes code for creating datasets for January, February, and new hires, followed by printing and merging them. The right panel shows the 'Environment' tab with global variables and the 'File Browser' showing local files like 'disease\_diagnosis.csv' and 'loan\_approval.csv'. The system tray at the bottom indicates battery level, network status, and system date.

Session 1 (Top Left):

```
> library(dplyr) # Load the library for bind_rows  
> # Dataset 1: Sales in January  
> data_jan <- data.frame(  
+   ID = c(1, 2, 3),  
+   Name = c("Amit", "Piyush", "Rahul"),  
+   Jan_Sales = c(120, 180, 250)  
)  
>  
> # Dataset 2: sales in February  
> data_feb <- data.frame(  
+   ID = c(1, 2, 3),  
+   Name = c("Amit", "Piyush", "Rahul"),  
+   Feb_sales = c(140, 200, 270)  
)  
>  
> # Dataset 3: New Employees (for appending example)  
> data_new_hires <- data.frame(  
+   ID = c(4, 5),  
+   Name = c("Sneha", "Rohan"),  
+   Jan_sales = c(90, 110)  
)  
>  
> print("---- Data January ----")  
[1] "---- Data January ----"  
> print(data_jan)  
#> ID Name Jan_Sales  
#> 1 1 Amit 120  
#> 2 2 Piyush 180  
#> 3 3 Rahul 250  
> print("---- Data February ----")  
[1] "---- Data February ----"  
> print(data_feb)  
#> ID Name Feb_Sales  
#> 1 1 Amit 140  
#> 2 2 Piyush 200  
#> 3 3 Rahul 270  
#>
```

Session 2 (Bottom Left):

```
> # 1. BIND (Stacking Rows)  
> # -----  
> merged_data <- bind_rows(data_jan, data_feb, by = c("ID", "Name"))  
> print("---- Merged Data (Columns Added) ----")  
[1] "---- Merged Data (Columns Added) ----"  
> print(merged_data)  
#> ID Name Jan_Sales Feb_Sales  
#> 1 1 Amit 120 140  
#> 2 2 Piyush 180 200  
#> 3 3 Rahul 250 270  
> print("---- APPEND (Appending Rows) ----")  
> # -----  
> final_list <- bind_rows(data_jan, data_new_hires)  
> print("---- Appended Data (Rows Added) ----")  
[1] "---- Appended Data (Rows Added) ----"  
> print(final_list)  
#> ID Name Jan_Sales  
#> 1 1 Amit 120  
#> 2 2 Piyush 180  
#> 3 3 Rahul 250  
#> 4 4 Sneha 90  
#> 5 5 Rohan 110  
> view(data_feb)  
> view(data_jan)  
> |
```

Environment Tab (Top Right):

Name	Size	Modified
data_feb	3 obs. of 3 variables	189.1 KB Dec 1, 2025, 10:50 AM
data_jan	3 obs. of 3 variables	113.1 KB Nov 24, 2025, 12:06 PM
data_new_hires	2 obs. of 3 variables	2.6 MB Nov 15, 2025, 8:31 AM
final_list	5 obs. of 3 variables	1.3 MB Nov 13, 2025, 8:49 AM
merged_data	3 obs. of 4 variables	Virtual Machines

File Browser (Right):

Name	Size	Modified
disease_diagnosis.csv	189.1 KB	Dec 1, 2025, 10:50 AM
GIS Database		
IISExpress		
loan_approval.csv	113.1 KB	Nov 24, 2025, 12:06 PM
My Music		
My Pictures		
My Videos		
My Web Site		
NetBeansProjects		
Power BI Desktop		
S103 Cn 1stpdf	2.6 MB	Nov 15, 2025, 8:31 AM
scala for DS		
Sound Recordings		
T050_AngaliT		
vgsales.csv	1.3 MB	Nov 13, 2025, 8:49 AM
Virtual Machines		
Visual Studio 18		

# SHETH L.U.J. AND SIR M.V. COLLEGE

## SUBJECT:Data Analysis with R

Showing 1 to 2 of 2 entries, 3 total columns

ID	Name	Jan_Sales
1	4 Sneha	90
2	5 Rohan	110

```

Console Terminal Background Jobs
> print(data_feb)
  ID Name Feb_Sales
1 1 Amit 140
2 2 Piyush 200
3 3 Rahul 270
> # -----
> # 2. MERGE (Joining Columns)
> # -----
> merged_data <- merge(data_jan, data_feb, by = c("ID", "Name"))
> print("---- Merged Data (Columns Added) ----")
[1] "---- Merged Data (Columns Added) ----"
> print(merged_data)
  ID Name Jan_Sales Feb_Sales
1 1 Amit 120 140
2 2 Piyush 180 200
3 3 Rahul 250 270
> # -----
> # 3. APPEND (Stacking Rows)
> # -----
> final_list <- bind_rows(data_jan, data_new_hires)
> print("---- Appended Data (Rows Added) ----")
[1] "---- Appended Data (Rows Added) ----"
> print(final_list)
  ID Name Jan_Sales
1 1 Amit 120
2 2 Piyush 180
3 3 Rahul 250
4 4 Sneha 90
5 5 Rohan 110
> view(data_feb)
> view(data_jan)
> view(data_new_hires)
>

```

Nifty bank +0.52%

ENG IN 11:05 01-12-2025

  

Showing 1 to 5 of 5 entries, 3 total columns

ID	Name	Jan_Sales
1	1 Amit	120
2	2 Piyush	180
3	3 Rahul	250
4	4 Sneha	90
5	5 Rohan	110

```

Console Terminal Background Jobs
> R.4.5.2 - C:/Users/tlab/Desktop/-
1 1 Amit 140
2 2 Piyush 200
3 3 Rahul 270
> # -----
> # 2. MERGE (Joining Columns)
> # -----
> merged_data <- merge(data_jan, data_feb, by = c("ID", "Name"))
> print("---- Merged Data (Columns Added) ----")
[1] "---- Merged Data (Columns Added) ----"
> print(merged_data)
  ID Name Jan_Sales Feb_Sales
1 1 Amit 120 140
2 2 Piyush 180 200
3 3 Rahul 250 270
> # -----
> # 3. APPEND (Stacking Rows)
> # -----
> final_list <- bind_rows(data_jan, data_new_hires)
> print("---- Appended Data (Rows Added) ----")
[1] "---- Appended Data (Rows Added) ----"
> print(final_list)
  ID Name Jan_Sales
1 1 Amit 120
2 2 Piyush 180

```

Gold +0.84%

ENG IN 11:06 01-12-2025

# SHETH L.U.J. AND SIR M.V. COLLEGE

## SUBJECT:Data Analysis with R

The screenshot shows the RStudio interface with the following components:

- Data View:** Displays a table with columns ID, Name, Jan\_Sales, and Feb\_Sales. The data is as follows:

ID	Name	Jan_Sales	Feb_Sales
1	Amit	120	140
2	Piyush	180	200
3	Rahul	250	270

- Environment View:** Shows the global environment with objects: data\_feb, data\_jan, data\_new\_hires, final\_list, and merged\_data.
- Console View:** Displays the R session history. The user has run several commands to append data frames and view them. The output shows the combined data frame final\_list with 5 rows and 4 columns.
- File Explorer:** Shows the file system structure on the desktop, including CSV files like disease\_diagnosis.csv, loan\_approval.csv, and various folder icons.
- System Tray:** Shows battery status (Gold +0.84%), network connection, and system time (11:06 AM, 01-12-2025).