

SHETH L.U.J AND M.V COLLEGE
PRACTICAL NO .12
SUBJECT - DATA ANALYSIS

AIM - 12. Combining datasets vertically (concatenation) using rbind() (R).
Write code toCombining datasets vertically (concatenation) using rbind() in R studio.
INPUT -data(iris)

```
flower_df <- read.csv("flower_dataset.csv")

print("--- Data Structure Before Transformation ---")
print(names(iris))
print(names(flower_df))

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")

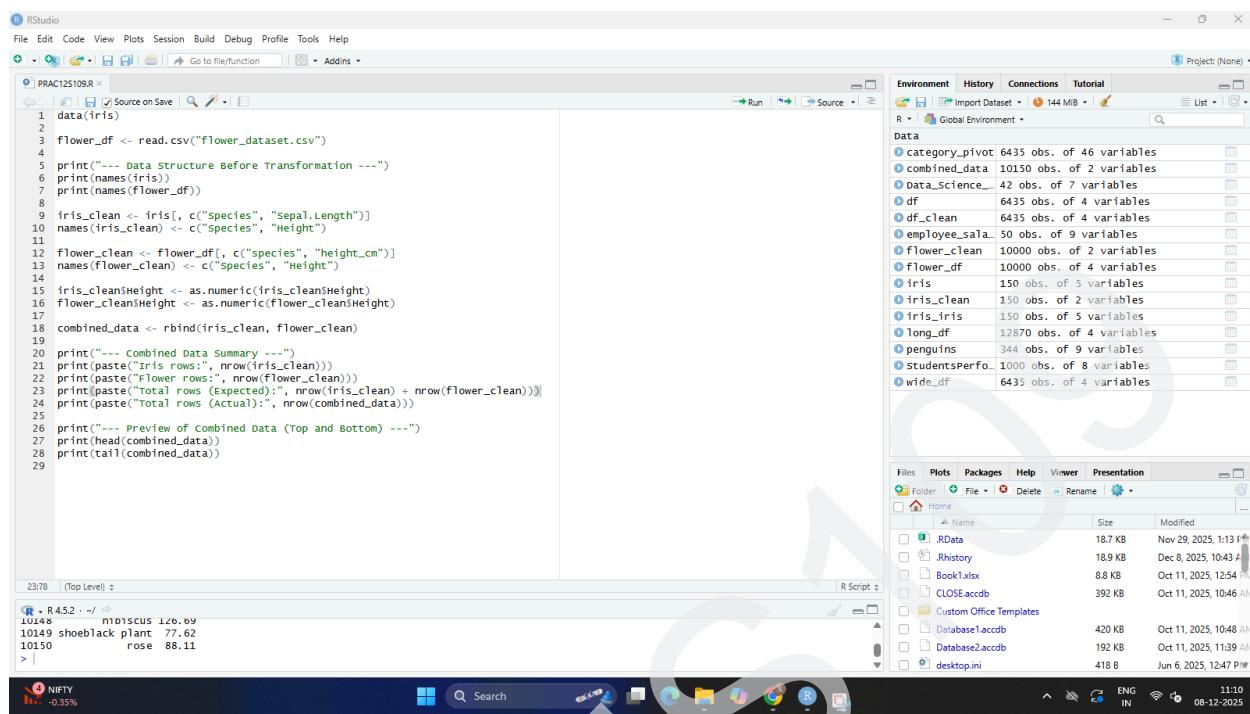
iris_clean$Height <- as.numeric(iris_clean$Height)
flower_clean$Height <- as.numeric(flower_clean$Height)

combined_data <- rbind(iris_clean, flower_clean)

print("--- Combined Data Summary ---")
print(paste("Iris rows:", nrow(iris_clean)))
print(paste("Flower rows:", nrow(flower_clean)))
print(paste("Total rows (Expected):", nrow(iris_clean) + nrow(flower_clean)))
print(paste("Total rows (Actual):", nrow(combined_data)))

print("--- Preview of Combined Data (Top and Bottom) ---")
print(head(combined_data))
print(tail(combined_data))
```

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```

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

```

R 4.5.2 - ~

```

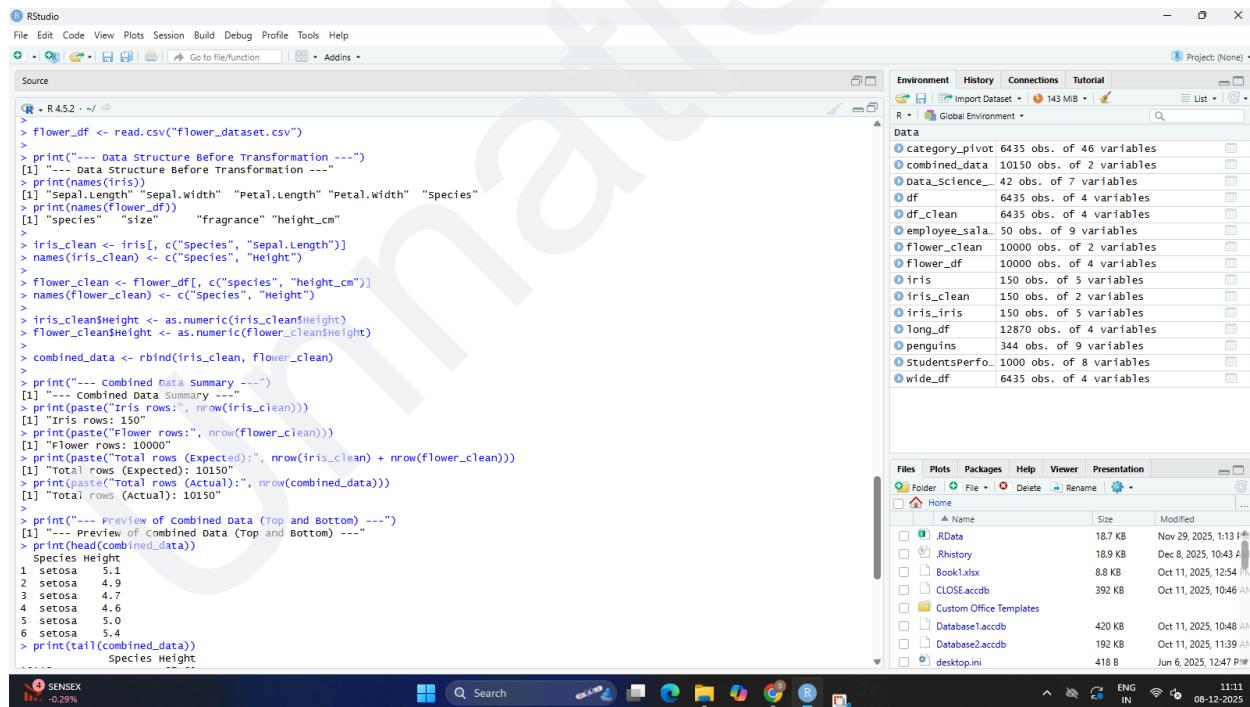
10148  ntidiscus 126.09
10149  shoeblack plant 77.62
10150  rose 68.11
>

```

NIFTY -0.35%

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OUTPUT -



```

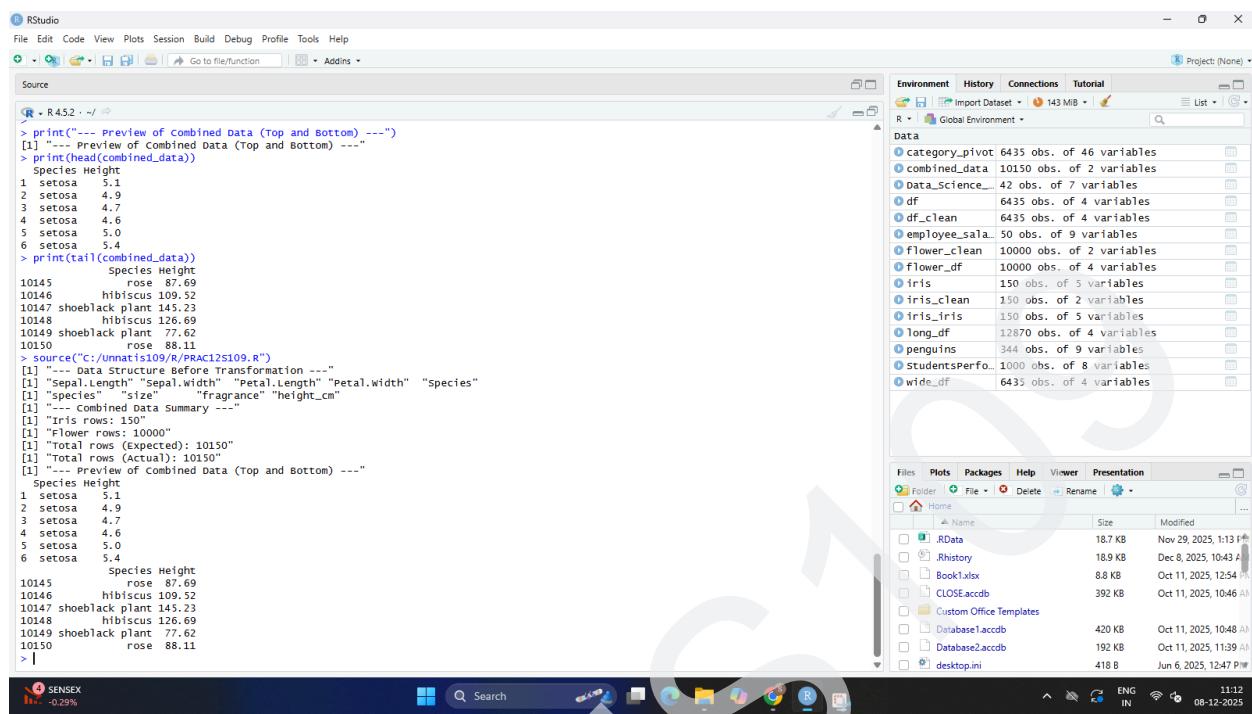
R 4.5.2 - ~
> flower_df <- read.csv("flower_dataset.csv")
>
> print("---- Data Structure Before Transformation ----")
[1] "---- Data Structure Before Transformation ----"
> print(names(iris))
[1] "Sepal.Length" "Sepal.Width" "Petal.Length" "Petal.Width" "Species"
> print(names(flower_df))
[1] "Species" "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"
>
> print("---- Preview of Combined Data (Top and Bottom) ----")
[1] "---- Preview of Combined Data (Top and Bottom) ----"
> print(head(combined_data))
> 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

```

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R Studio

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins

Source

```
R - R 4.5.2 - ~/
```

```
> 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
> source("C:/UNNATI109/R/PRAC12S109.R")
[1] "---- Data Structure Before Transformation ----"
[1] "Sepal.Length" "Sepal.Width" "Petal.Length" "Petal.Width" "Species"
[1] "Species" "Size" "Fragrance" "Height_cm"
[1] "---- Combined Data Summary ----"
[1] "Nans: 0 rows: 150"
[1] "Total rows (Expected): 10150"
[1] "Total rows (Actual): 10150"
[1] "---- Preview of Combined Data (Top and Bottom) ----"
  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
      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 History Connections Tutorial

Import Dataset 143 MB

R Global Environment

Data

- category_pivot 6435 obs. of 46 variables
- combined_data 10150 obs. of 2 variables
- data_science_... 42 obs. of 7 variables
- df 6435 obs. of 4 variables
- df_clean 6435 obs. of 4 variables
- employee_sala... 50 obs. of 9 variables
- flower_clean 10000 obs. of 2 variables
- flower_df 10000 obs. of 4 variables
- iris 150 obs. of 5 variables
- iris_clean 150 obs. of 2 variables
- iris_iris 150 obs. of 5 variables
- long_df 12870 obs. of 4 variables
- penguins 344 obs. of 9 variables
- studentperfo... 1000 obs. of 8 variables
- wide_df 6435 obs. of 4 variables

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Name	Size	Modified
RData	18.7 KB	Nov 29, 2025, 1:13 PM
Rhistory	18.9 KB	Dec 8, 2025, 10:43 AM
Book1.xlsx	8.8 KB	Oct 11, 2025, 12:54 PM
CLOSEaccdb	392 KB	Oct 11, 2025, 10:46 AM
Custom Office Templates	420 KB	Oct 11, 2025, 10:48 AM
Database1.accdb	192 KB	Oct 11, 2025, 11:39 AM
Database2.accdb	418 B	Jun 6, 2025, 12:47 PM
desktop.ini	418 B	Jun 6, 2025, 12:47 PM