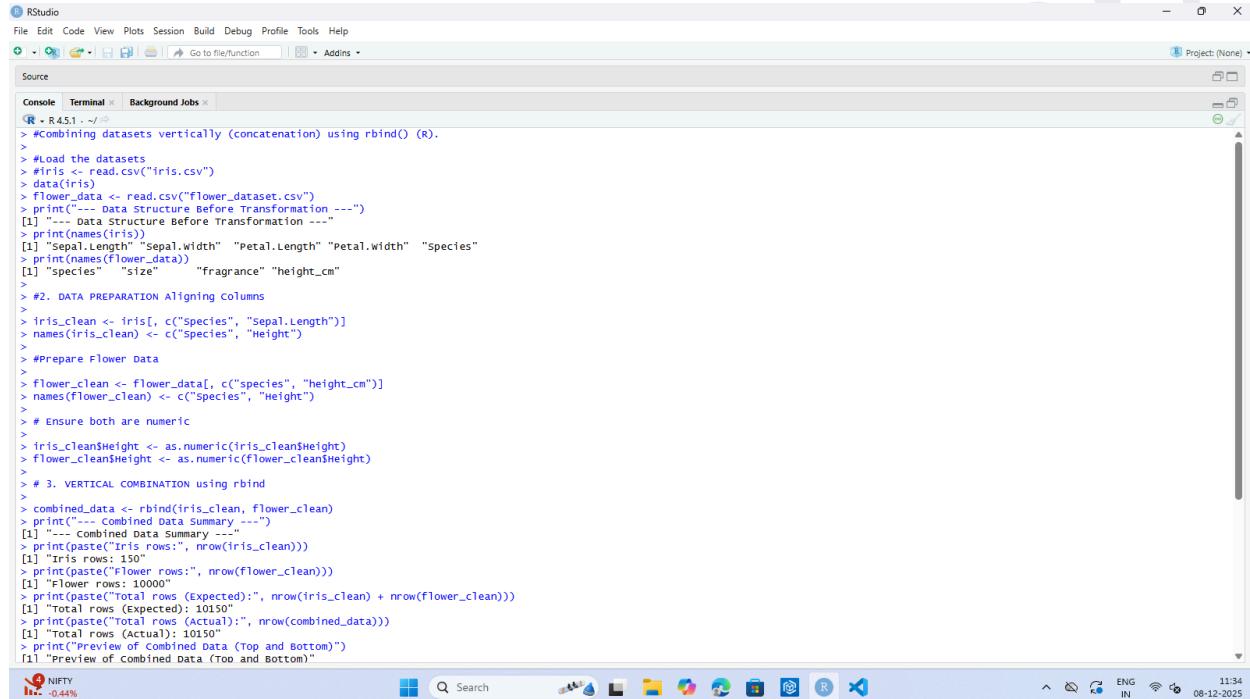


Practical No 12

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

Output :



The screenshot shows the RStudio interface with the following R code:

```
R> #Combining datasets vertically (concatenation) using rbind() (R).
R> 
R> #Load the datasets
R> iris_clean <- read.csv("iris.csv")
R> data(iris)
R> flower_data <- read.csv("flower_dataset.csv")
R> print("--- Data Structure Before Transformation ---")
[1] "--- Data Structure Before Transformation ---"
R> print(names(iris))
[1] "Sepal.Length" "Petal.Length" "Petal.Width" "Species"
R> print(names(flower_data))
[1] "Species" "Size" "Fragrance" "Height_cm"
R> 
R> #2. DATA PREPARATION Aligning columns
R> 
R> iris_clean <- iris[, c("Species", "Sepal.Length")]
R> names(iris_clean) <- c("Species", "Height")
R> 
R> #Prepare Flower Data
R> 
R> flower_clean <- flower_data[, c("Species", "height_cm")]
R> names(flower_clean) <- c("Species", "Height")
R> 
R> # Ensure both are numeric
R> 
R> iris_clean$Height <- as.numeric(iris_clean$Height)
R> flower_clean$Height <- as.numeric(flower_clean$Height)
R> 
R> # 3. VERTICAL COMBINATION using rbind
R> 
R> combined_data <- rbind(iris_clean, flower_clean)
R> print("--- Combined Data Summary ---")
[1] "--- Combined Data Summary ---"
R> print(paste("Iris rows:", nrow(iris_clean)))
[1] "Iris rows: 150"
R> print(paste("Flower rows:", nrow(flower_clean)))
[1] "Flower rows: 10000"
R> print(paste("Total rows (Expected):", nrow(iris_clean) + nrow(flower_clean)))
[1] "Total rows (Expected): 10150"
R> print(paste("Total rows (Actual):", nrow(combined_data)))
[1] "Total rows (Actual): 10150"
R> print("Preview of Combined Data (Top and Bottom)")
[1] "Preview of Combined Data (Top and Bottom)"
```

The RStudio interface includes a menu bar (File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help), a toolbar with various icons, and a status bar at the bottom showing the date and time (08-12-2025, 11:34). The code is displayed in the Source tab of the console.

SHETH L.U.J. AND SIR M.V. COLLEGE OF ARTS SCIENCE AND COMMERCE

SUBJECT : R Programming



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 - ~/
> #Prepare Flower Data
> flower_clean <- flower_data[, c("species", "height_cm")]
> names(flower_clean) <- c("Species", "Height")
>
> # Ensure both are numeric
>
> iris_clean\$height <- as.numeric(iris_clean\$height)
> flower_clean\$height <- as.numeric(flower_clean\$height)
>
> # 3. VERTICAL COMBINATION using rbind
>
> 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): 10500"
> 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
> |