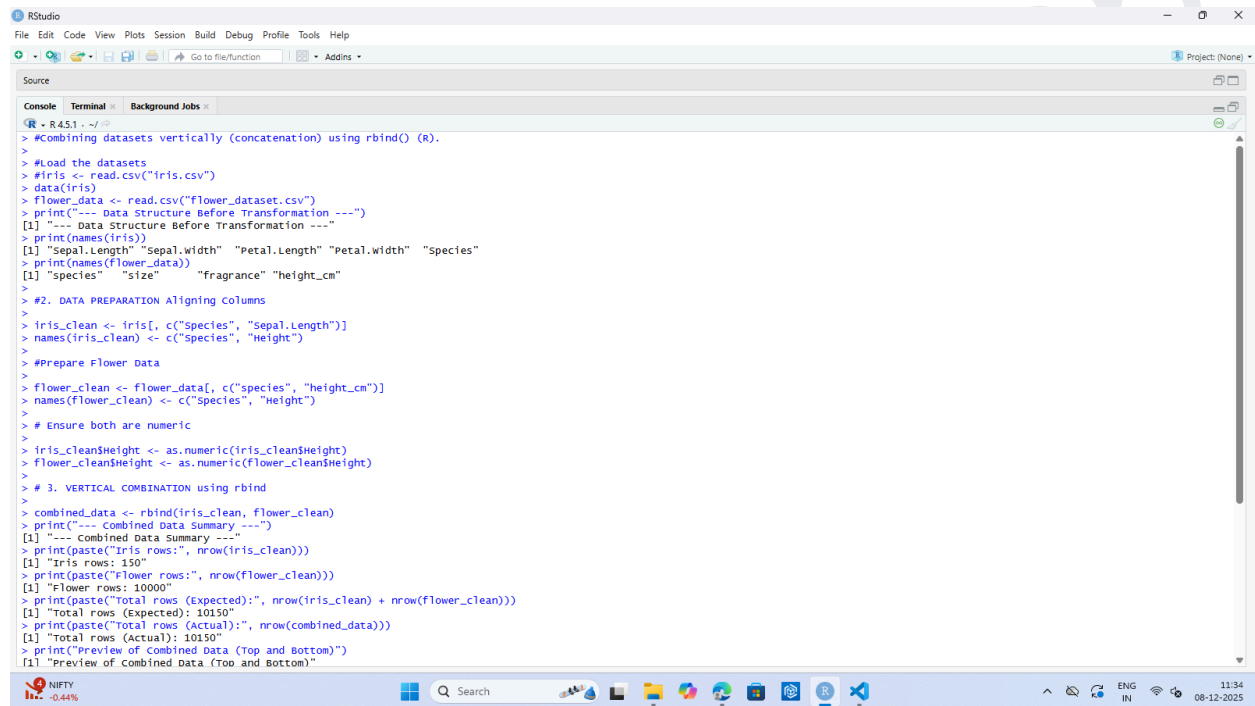


Practical No 12

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

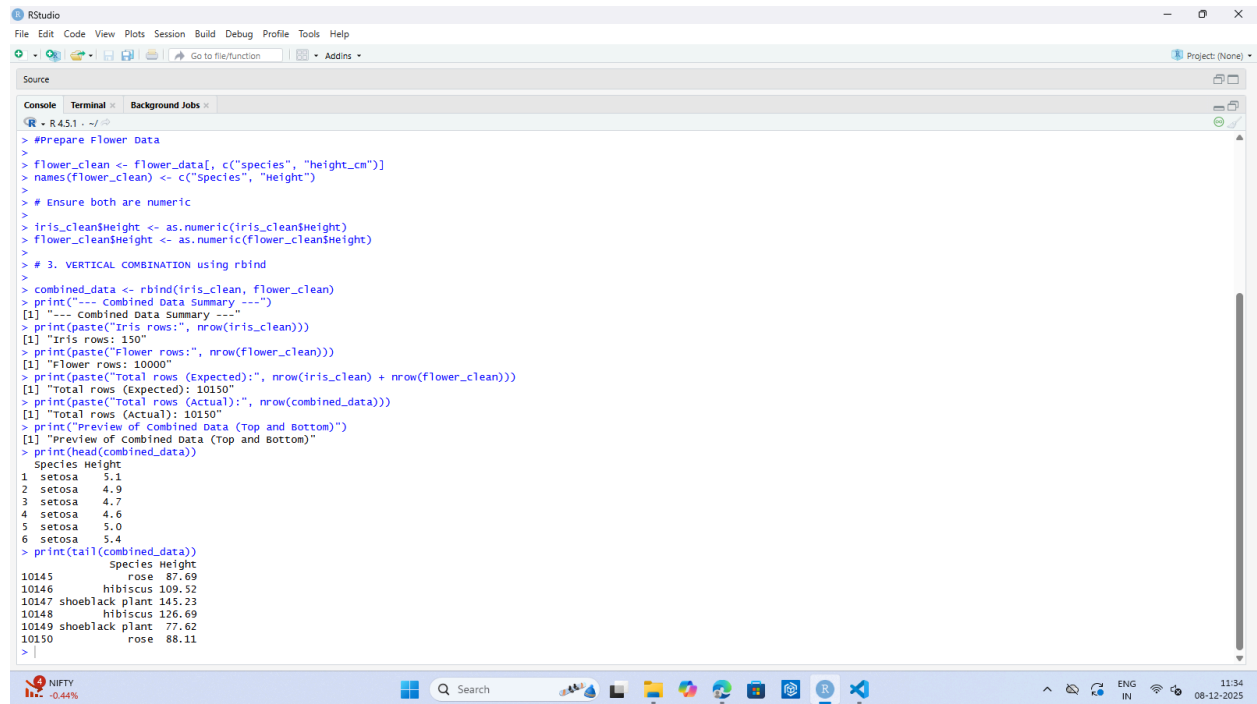
Output :



```
R - R4.5.1 - ~/R
File Edit Code View Plots Session Build Debug Profile Tools Help
Source
Console Terminal Background Jobs
> #Combining datasets vertically (concatenation) using rbind() (R).
>
> #Load the datasets
> #iris <- read.csv("iris.csv")
> data(iris)
> flower_data <- 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_data))
[1] "Species" "size" "fragrance" "height_cm"
>
> #2. DATA PREPARATION Aligning columns
>
> iris_clean <- iris[, c("Species", "Sepal.Length")]
> names(iris_clean) <- c("Species", "Height")
>
> #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): 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)"
```

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

SUBJECT : R Programming



```
> #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): 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 145.23
10148 hibiscus 126.69
10149 shoeblack  77.62
10150   rose    88.11
>
```

NAME : SHUBHAM SANJAY KARAPE
ROLL NO : S085