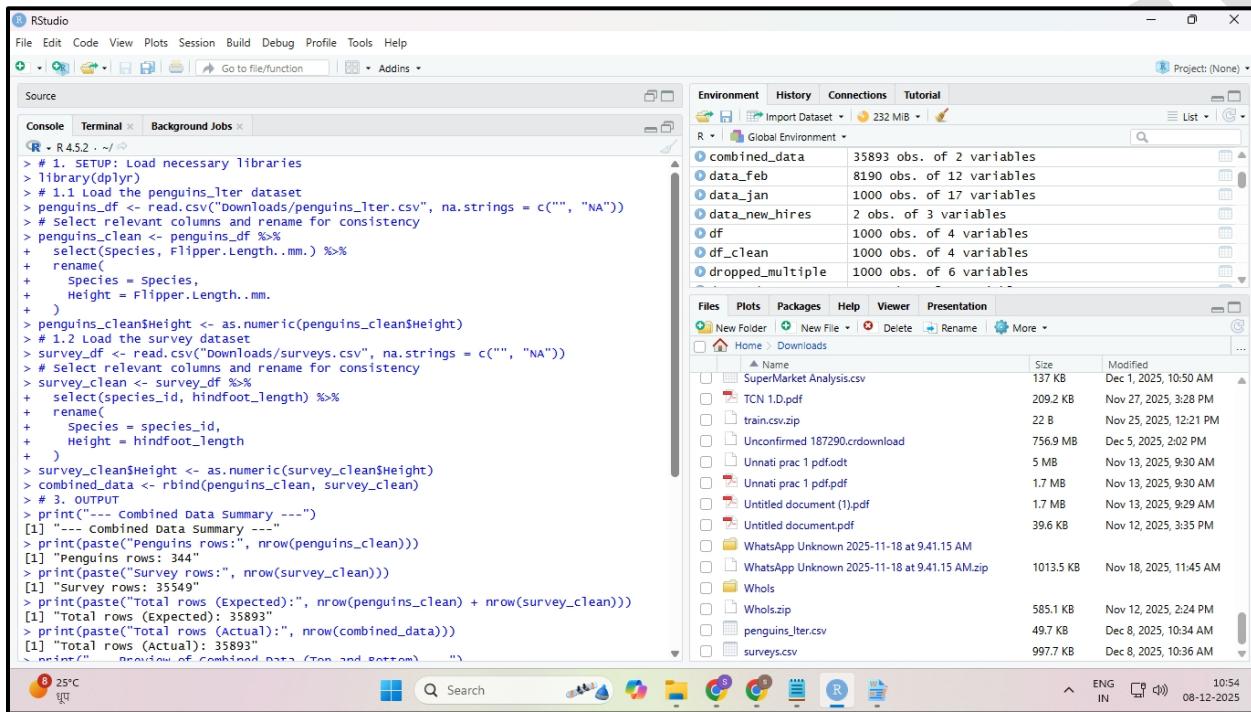


Sheth L.U.J. College of Arts & Sir M.V. College Of Science & Commerce
SUBJECT NAME: Data Analysis with SAS / SPSS/R

PRACTICAL NO : 12

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



RStudio interface showing the following R code in the Console:

```

> # 1. SETUP: Load necessary libraries
> library(dplyr)
> # 1.1 Load the penguins_lter dataset
> penguins_df <- read.csv("Downloads/penguins_lter.csv", na.strings = c("", "NA"))
> # Select relevant columns and rename for consistency
> penguins_clean <- penguins_df %>%
+   select(species, Flipper.Length..mm.) %>%
+   rename(
+     species = species,
+     Height = Flipper.Length..mm.
+   )
> penguins_clean$Height <- as.numeric(penguins_clean$Height)
> # 1.2 Load the survey dataset
> survey_df <- read.csv("Downloads/surveys.csv", na.strings = c("", "NA"))
> # Select relevant columns and rename for consistency
> survey_clean <- survey_df %>%
+   select(species_id, hindfoot_length) %>%
+   rename(
+     species = species_id,
+     Height = hindfoot_length
+   )
> survey_clean$Height <- as.numeric(survey_clean$Height)
> combined_data <- rbind(penguins_clean, survey_clean)
> # 3. OUTPUT
> print("--- Combined Data Summary ---")
[1] "--- Combined Data Summary ---"
> print(paste("Penguins rows:", nrow(penguins_clean)))
[1] "Penguins rows: 344"
> print(paste("Survey rows:", nrow(survey_clean)))
[1] "Survey rows: 35549"
> print(paste("Total rows (Expected):", nrow(penguins_clean) + nrow(survey_clean)))
[1] "Total rows (Expected): 35893"
> print(paste("Total rows (Actual):", nrow(combined_data)))
[1] "Total rows (Actual): 35893"
> print("  Preview of combined data (Top and Bottom)  ")

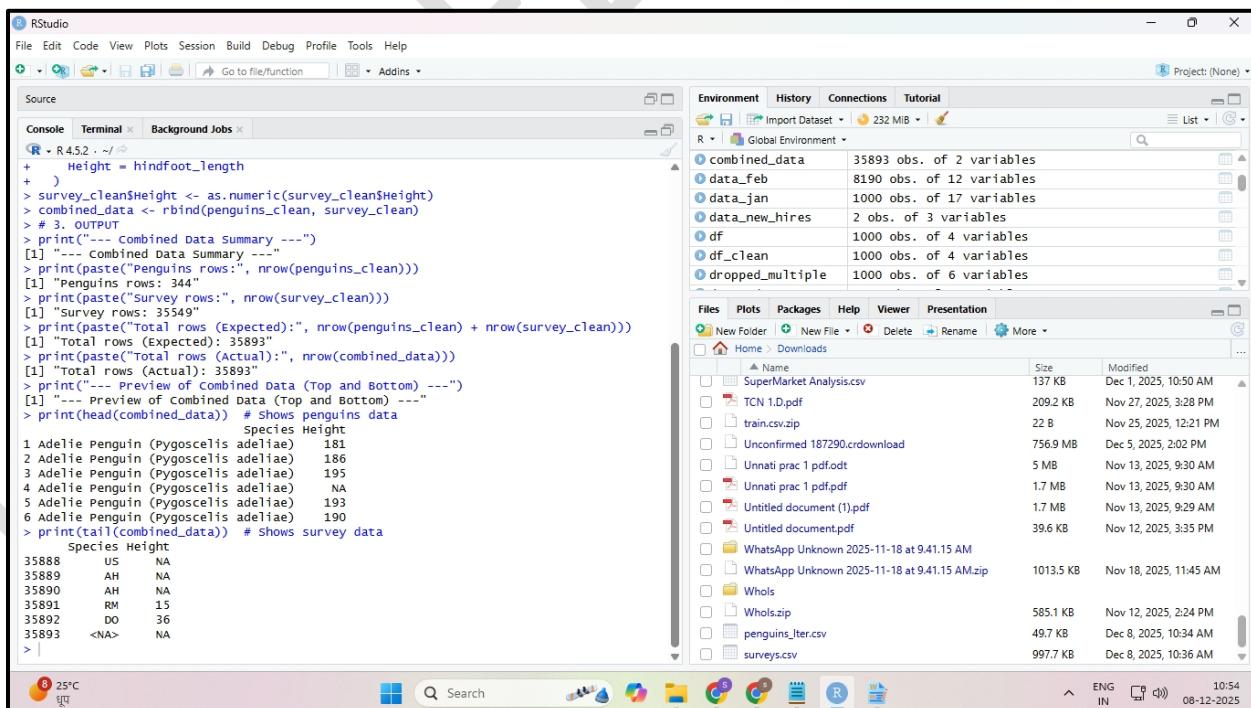
```

The Environment pane shows the following objects:

- combined_data: 35893 obs. of 2 variables
- data_feb: 8190 obs. of 12 variables
- data_jan: 1000 obs. of 17 variables
- data_new_hires: 2 obs. of 3 variables
- df: 1000 obs. of 4 variables
- df_clean: 1000 obs. of 4 variables
- dropped_multiple: 1000 obs. of 6 variables

The Files pane shows the following files:

Name	Size	Modified
SuperMarket Analysis.csv	137 KB	Dec 1, 2025, 10:50 AM
TCN 1.D.pdf	209.2 KB	Nov 27, 2025, 3:28 PM
train.csv.zip	22 B	Nov 25, 2025, 12:21 PM
Unconfirmed 187290.crdownload	756.9 MB	Dec 5, 2025, 2:02 PM
Unnati prac 1 pdf.pdf	5 MB	Nov 13, 2025, 9:30 AM
Unnati prac 1 pdf.pdf	1.7 MB	Nov 13, 2025, 9:30 AM
Untitled document (1).pdf	1.7 MB	Nov 13, 2025, 9:29 AM
Untitled document.pdf	39.6 KB	Nov 12, 2025, 3:35 PM
WhatsApp Unknown 2025-11-18 at 9:41.15 AM		
WhatsApp Unknown 2025-11-18 at 9:41.15 AM.zip	1013.5 KB	Nov 18, 2025, 11:45 AM
Whols		
Whols.zip	585.1 KB	Nov 12, 2025, 2:24 PM
penguins_lter.csv	49.7 KB	Dec 8, 2025, 10:34 AM
surveys.csv	997.7 KB	Dec 8, 2025, 10:36 AM



RStudio interface showing the continuation of the R code in the Console:

```

+   Height = hindfoot_length
+ )
> survey_clean$Height <- as.numeric(survey_clean$Height)
> combined_data <- rbind(penguins_clean, survey_clean)
> # 3. OUTPUT
> print("--- Combined Data Summary ---")
[1] "--- Combined Data Summary ---"
> print(paste("Penguins rows:", nrow(penguins_clean)))
[1] "Penguins rows: 344"
> print(paste("Survey rows:", nrow(survey_clean)))
[1] "Survey rows: 35549"
> print(paste("Total rows (Expected):", nrow(penguins_clean) + nrow(survey_clean)))
[1] "Total rows (Expected): 35893"
> print(paste("Total rows (Actual):", nrow(combined_data)))
[1] "Total rows (Actual): 35893"
> print("  --- Preview of Combined Data (Top and Bottom) ---")
[1] "  --- Preview of Combined Data (Top and Bottom) ---"
> print(head(combined_data)) # Shows penguins data
   Species Height
1 Adelie Penguin (Pygoscelis adeliae) 181
2 Adelie Penguin (Pygoscelis adeliae) 186
3 Adelie Penguin (Pygoscelis adeliae) 195
4 Adelie Penguin (Pygoscelis adeliae) NA
5 Adelie Penguin (Pygoscelis adeliae) 193
6 Adelie Penguin (Pygoscelis adeliae) 190
> print(tail(combined_data)) # Shows survey data
   Species Height
35888  US  NA
35889  AH  NA
35890  AH  NA
35891  RM  15
35892  DO  36
35893  <NA>  NA
>

```

The Environment pane shows the same objects as the first screenshot.

The Files pane shows the same files as the first screenshot.