

MVLU COLLEGE
Data analysis with SAS/SSPR/R
PRACTICAL NO.12

Aim: 12. Combining datasets vertically (concatenation) using rbind() (R).

Write code to Combining datasets vertically (concatenation) using rbind() in R studio.

INPUT:

```
amazon_df <- read.csv("D:/S119/DATA ANAN/Amazon.csv", na.strings = c("", "NA"))  
flipkart_df <- read.csv("D:/S119/DATA ANAN/flipkart.csv")
```

```
print(names(amazon_df))  
print(names(flipkart_df))
```

```
amazon_clean <- amazon_df[, c("Category", "UnitPrice")]  
names(amazon_clean) <- c("Species", "Height")
```

```
flipkart_clean <- flipkart_df[, c("maincateg", "actprice")]  
names(flipkart_clean) <- c("Species", "Height")
```

```
amazon_clean$Height <- as.numeric(amazon_clean$Height)  
flipkart_clean$Height <- as.numeric(flipkart_clean$Height)
```

```
combined_data <- rbind(amazon_clean, flipkart_clean)
```

```
print("--- Combined Data Summary ---")  
print(paste("Amazon rows:", nrow(amazon_clean)))  
print(paste("Flipkart rows:", nrow(flipkart_clean)))  
print(paste("Total rows (Expected):", nrow(amazon_clean) + nrow(flipkart_clean)))  
print(paste("Total rows (Actual):", nrow(combined_data)))
```

```
print(head(combined_data))  
print(tail(combined_data))
```

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OUTPUT:

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The image displays two screenshots of the RStudio interface, showing the execution of R code for data analysis. The top screenshot shows the initial data loading and cleaning steps, while the bottom screenshot shows the final data summary and the R environment window.

Top Screenshot: RStudio Console

```
> amazon_df <- read.csv("D:/S119/DATA ANAN/Amazon.csv", na.strings = c("", "NA"))
> flipkart_df <- read.csv("D:/S119/DATA ANAN/Flipkart.csv")
>
> print(names(amazon_df))
[1] "OrderID"      "OrderDate"    "CustomerID"   "CustomerName"
[5] "ProductID"    "ProductName"   "Category"     "Brand"
[9] "Quantity"     "UnitPrice"    "Discount"     "Tax"
[13] "ShippingCost" "TotalAmount"  "PaymentMethod" "OrderStatus"
[17] "City"         "State"        "Country"      "SellerID"
> print(names(flipkart_df))
[1] "id"           "title"        "Rating"       "maincateg"    "platform"
[6] "actprice1"   "norating1"    "noreviews1"   "star_5f"      "star_4f"
[11] "star_3f"     "star_2f"      "star_1f"      "fulfilled1"
>
> amazon_clean <- amazon_df[, c("Category", "UnitPrice")]
> names(amazon_clean) <- c("Species", "Height")
>
> flipkart_clean <- flipkart_df[, c("maincateg", "actprice1")]
> names(flipkart_clean) <- c("Species", "Height")
>
> amazon_clean$Height <- as.numeric(amazon_clean$Height)
> flipkart_clean$Height <- as.numeric(flipkart_clean$Height)
>
> combined_data <- rbind(amazon_clean, flipkart_clean)
>
> print("--- Combined Data Summary ---")
[1] "--- Combined Data Summary ---"
> print(paste("Amazon rows:", nrow(amazon_clean)))
[1] "Amazon rows: 100000"
> print(paste("Flipkart rows:", nrow(flipkart_clean)))
[1] "Flipkart rows: 5244"
> print(paste("Total rows (Expected):", nrow(amazon_clean) + nrow(flipkart_clean)))
[1] "Total rows (Expected): 105244"
> print(paste("Total rows (Actual):", nrow(combined_data)))
[1] "Total rows (Actual): 105244"
>
> print(head(combined_data))
  Species Height
1   Books 106.59
2 Home & kitchen 251.37
3   Clothing   35.03
```

Bottom Screenshot: RStudio Console

```
> [6] "actprice1" "norating1" "noreviews1" "star_5f" "star_4f"
> [11] "star_3f" "star_2f" "star_1f" "fulfilled1"
>
> amazon_clean <- amazon_df[, c("Category", "UnitPrice")]
> names(amazon_clean) <- c("Species", "Height")
>
> flipkart_clean <- flipkart_df[, c("maincateg", "actprice1")]
> names(flipkart_clean) <- c("Species", "Height")
>
> amazon_clean$Height <- as.numeric(amazon_clean$Height)
> flipkart_clean$Height <- as.numeric(flipkart_clean$Height)
>
> combined_data <- rbind(amazon_clean, flipkart_clean)
>
> print("--- Combined Data Summary ---")
[1] "--- Combined Data Summary ---"
> print(paste("Amazon rows:", nrow(amazon_clean)))
[1] "Amazon rows: 100000"
> print(paste("Flipkart rows:", nrow(flipkart_clean)))
[1] "Flipkart rows: 5244"
> print(paste("Total rows (Expected):", nrow(amazon_clean) + nrow(flipkart_clean)))
[1] "Total rows (Expected): 105244"
> print(paste("Total rows (Actual):", nrow(combined_data)))
[1] "Total rows (Actual): 105244"
>
> print(head(combined_data))
  Species Height
1   Books 106.59
2 Home & kitchen 251.37
3   Clothing   35.03
4 Home & kitchen 35.03
5   Clothing 51.64
6   Books 44.73
> print(tail(combined_data))
  Species Height
105239 Women 4499
105240 Women 4499
105241 Men 499
105242 Men 499
105243 women 499
105244 Women 77
```

Environment Window (Top Screenshot):

Package	Description	Source	Version
data_new_hires	2 obs. of 3 variables		
df	100000 obs. of 4 variables		
df_clean	100000 obs. of 4 variables		
dropped_multiple	918 obs. of 10 variables		
dropped_one	918 obs. of 11 variables		
dropped_range	918 obs. of 8 variables		
final_list	5 obs. of 3 variables		
flipkart	5245 obs. of 14 variables		
flipkart_clean	5244 obs. of 2 variables		
flipkart_df	5244 obs. of 14 variables		

Environment Window (Bottom Screenshot):

Package	Description	Source	Version
askpass	Password Entry Utilities for R, Git...	CRAN	1.2.1
backports	Reimplementations of Functions L...	CRAN	1.5.0
base64enc	Tools for base64 encoding	CRAN	0.1-3
bit	Classes and Methods for Fast Me...	CRAN	4.6.0
bit64	A S3 Class for Vectors of 64bit Int...	CRAN	4.6.0-1
blob	A Simple S3 Class for Representin...	CRAN	1.2.4
broom	Convert Statistical Objects into TL...	CRAN	1.0.10
BSDA	Basic Statistics and Data Analysis	CRAN	1.2.2
bslib	Custom 'Bootstrap' 'Sass' Themes...	CRAN	0.8.0
cachem	Cache R Objects with Automatic P...	CRAN	1.1.0
callr	Call R from R	CRAN	3.7.6
cellranger	Translate Spreadsheet Cell Ranges...	CRAN	1.1.0
cli	Helpers for Developing Commans...	CRAN	3.6.5
clipr	Read and Write from the System ...	CRAN	0.8.0
conflicted	An Alternative Conflict Resolution...	CRAN	1.2.0
cpp11	A C++11 Interface for R's C Inter...	CRAN	0.5.2
crayon	Colored Terminal Output	CRAN	1.5.3
curl	A Modern and Flexible Web Clie...	CRAN	7.0.0

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