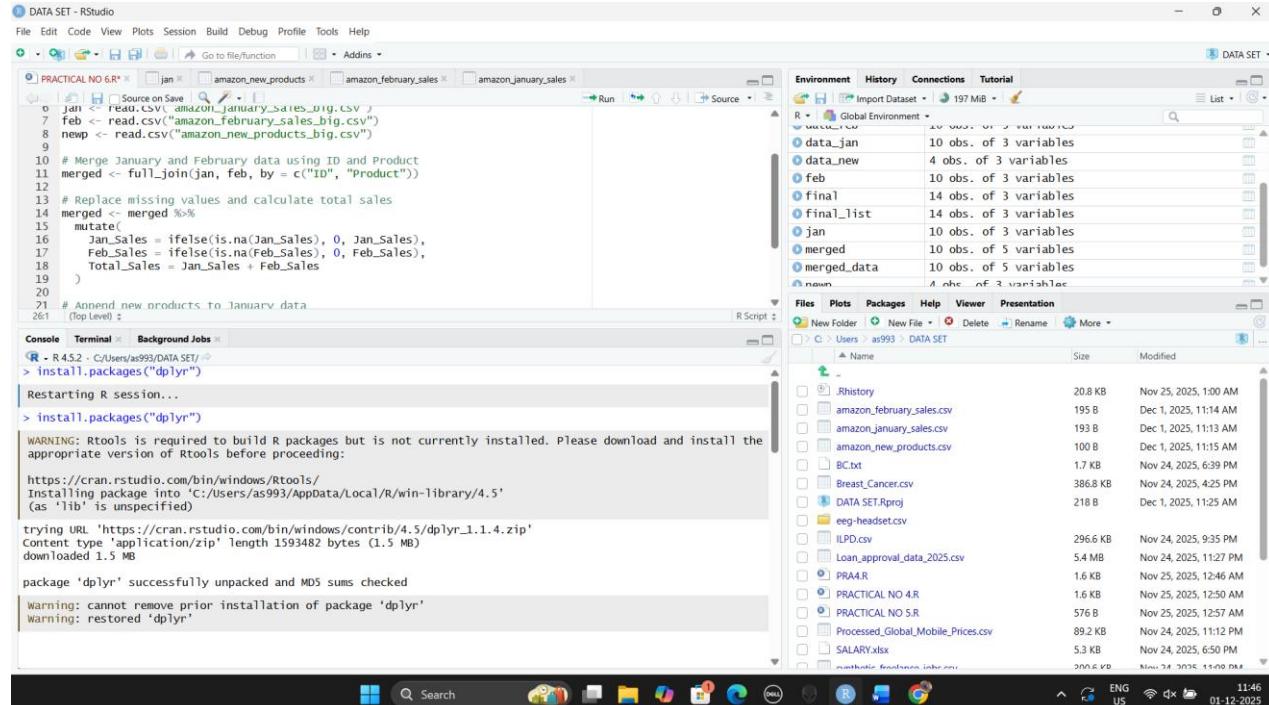


PRACTICAL NO 6

AIM:- Combining and appending datasets using merge() or bind_rows() in R.

OUTPUT:-



The screenshot shows the RStudio interface. The code editor contains R code for merging datasets:

```

1 jan <- read.csv("amazon_january_sales_orig.csv")
2 feb <- read.csv("amazon_february_sales_big.csv")
3 newp <- read.csv("amazon_new_products_big.csv")
4
5 # Merge January and February data using ID and Product
6 merged <- full_join(jan, feb, by = c("ID", "Product"))
7
8 # Replace missing values and calculate total sales
9 merged <- merged %>%
10   mutate(
11     Jan_Sales = ifelse(is.na(Jan_Sales), 0, Jan_Sales),
12     Feb_Sales = ifelse(is.na(Feb_Sales), 0, Feb_Sales),
13     Total_Sales = Jan_Sales + Feb_Sales
14   )
15
16 # Append new products to January data
17
18 
```

The console output shows the R session starting, installing dplyr, and the warning about rtools:

```

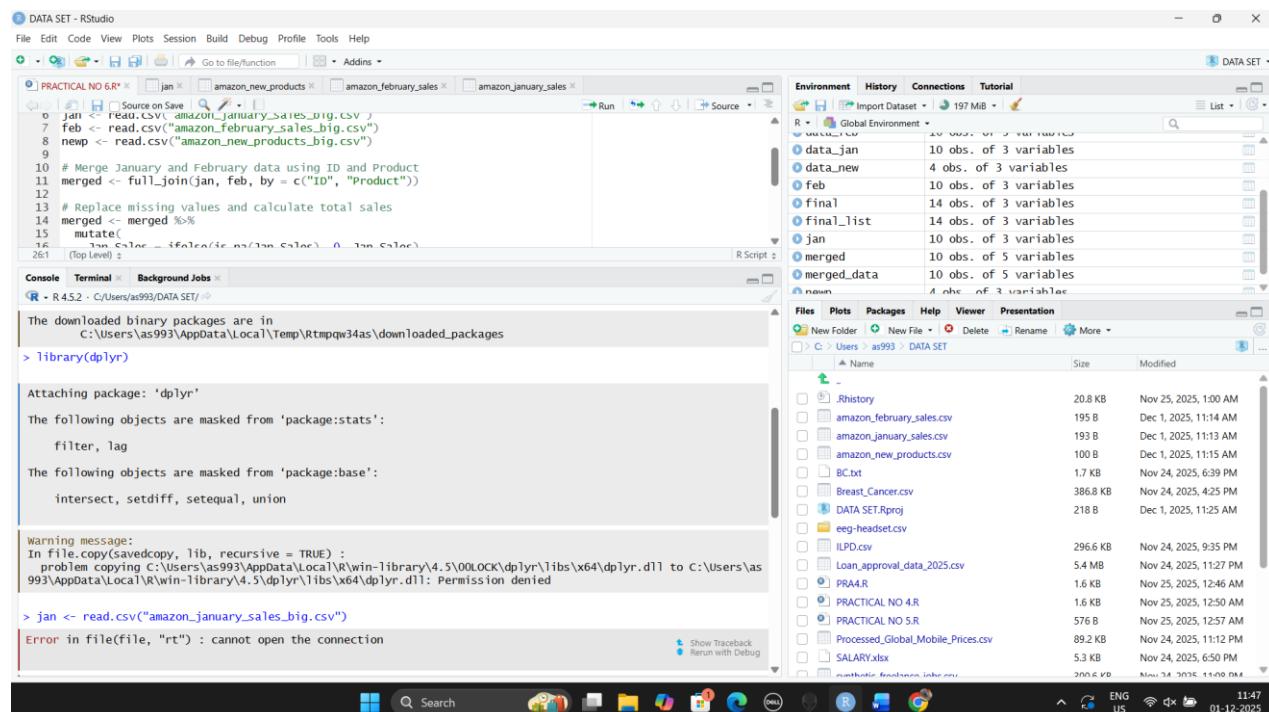
R 4.5.2 - C:/Users/as993/DATA SET<-
> install.packages("dplyr")
Restarting R session...
> install.packages("dplyr")

WARNING: Rtools is required to build R packages but is not currently installed. Please download and install the appropriate version of Rtools before proceeding:
https://cran.rstudio.com/bin/windows/Rtools/
Installing package into 'C:/Users/as993/AppData/Local/R/win-library/4.5'
(as 'lib' is unspecified)

trying URL 'https://cran.rstudio.com/bin/windows/contrib/4.5/dplyr_1.1.4.zip'
Content type 'application/zip' length 1593482 bytes (1.5 MB)
downloaded 1.5 MB

package 'dplyr' successfully unpacked and MD5 sums checked
Warning: cannot remove prior installation of package 'dplyr'
Warning: restored 'dplyr'
```

The environment pane shows various objects and their details. The file browser pane shows files in the 'DATA SET' folder.



The screenshot shows the RStudio interface. The code editor contains R code for merging datasets:

```

1 jan <- read.csv("amazon_january_sales_orig.csv")
2 feb <- read.csv("amazon_february_sales_big.csv")
3 newp <- read.csv("amazon_new_products_big.csv")
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9 merged <- merged %>%
10   mutate(
11     Jan_Sales = ifelse(is.na(Jan_Sales), 0, Jan_Sales),
12     Feb_Sales = ifelse(is.na(Feb_Sales), 0, Feb_Sales),
13     Total_Sales = Jan_Sales + Feb_Sales
14   )
15
16 # Append new products to January data
17
18 
```

The console output shows the R session starting, installing dplyr, and the warning about rtools:

```

R 4.5.2 - C:/Users/as993/DATA SET<-
The downloaded binary packages are in
  C:/Users/as993/AppData/Local\Temp\Rtmppqw34as\downloaded_packages
> library(dplyr)

Attaching package: 'dplyr'

The following objects are masked from 'package:stats':
  filter, lag

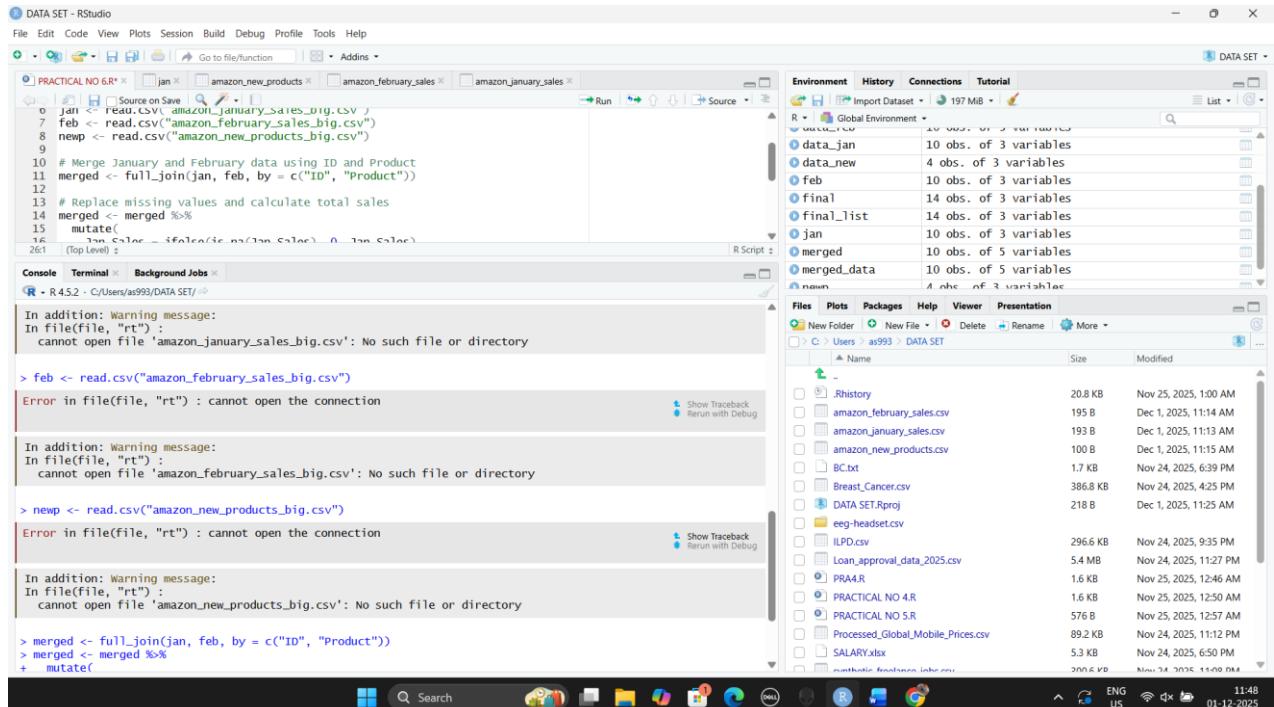
The following objects are masked from 'package:base':
  intersect, setdiff, setequal, union

Warning message:
In file.copy(savedcopy, lib, recursive = TRUE) :
  problem copying C:/Users/as993/Appdata/Local\R\win-library\4.5\00LOCK\dplyr\libs\x64\dplyr.dll to C:/Users/as993/Appdata/Local\R\win-library\4.5\dplyr\libs\x64\dplyr.dll: Permission denied

> jan <- read.csv("amazon_january_sales_big.csv")
> Error in file(file, "rt") : cannot open the connection
```

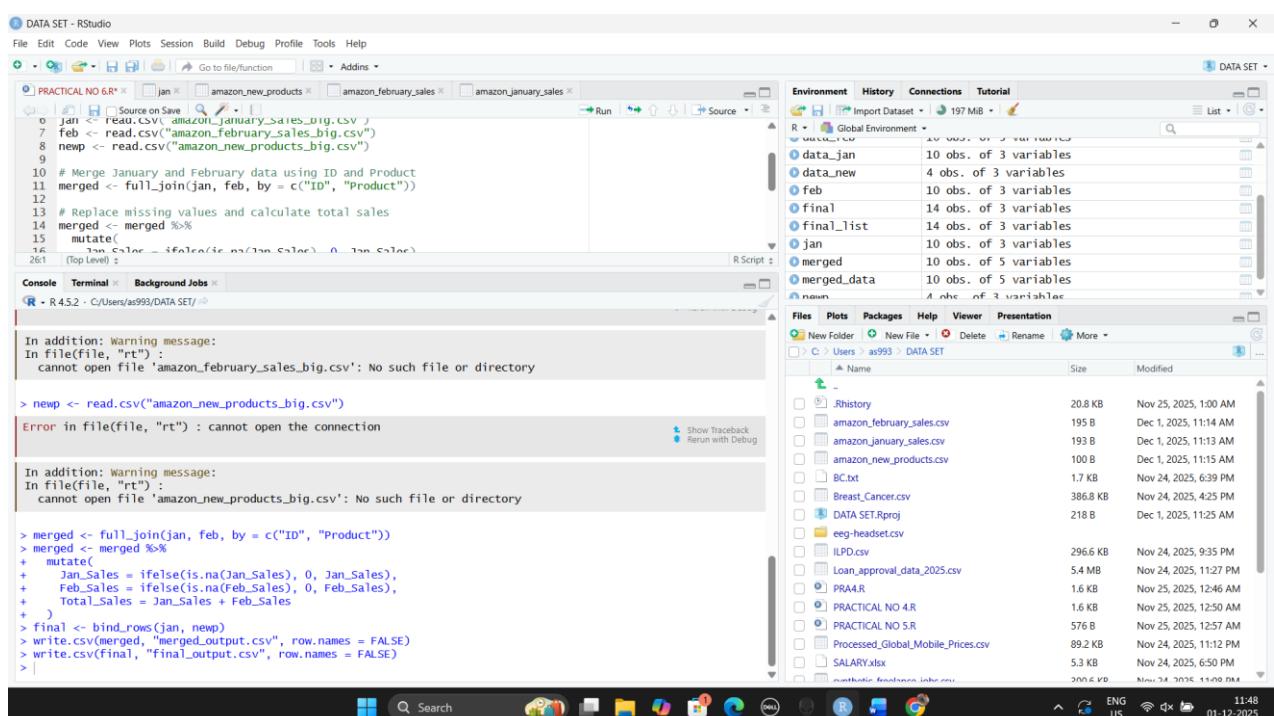
The environment pane shows various objects and their details. The file browser pane shows files in the 'DATA SET' folder.

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The screenshot shows the RStudio interface with the following details:

- File Menu:** File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help.
- Toolbar:** Source on Save, Go to file/function, Run, Source.
- Console Tab:** Shows R code and error messages. The code attempts to read CSV files for January, February, and new products. It merges them and calculates total sales. The error message indicates that the file 'amazon_january_sales_big.csv' cannot be found.
- Terminal Tab:** Shows the same error message for the February file.
- Background Jobs Tab:** Shows the same error message for the new products file.
- R Script Tab:** Shows the full R code for the analysis.
- Environment Tab:** Shows the global environment with various objects like data_jan, data_new, feb, final, final_list, jan, merged, merged_data, and new.
- Files Tab:** Shows a list of files in the current directory, including R scripts, CSV files, and other data files.
- System Taskbar:** Shows the date (01-12-2025), time (11:48), and system status (ENG US).

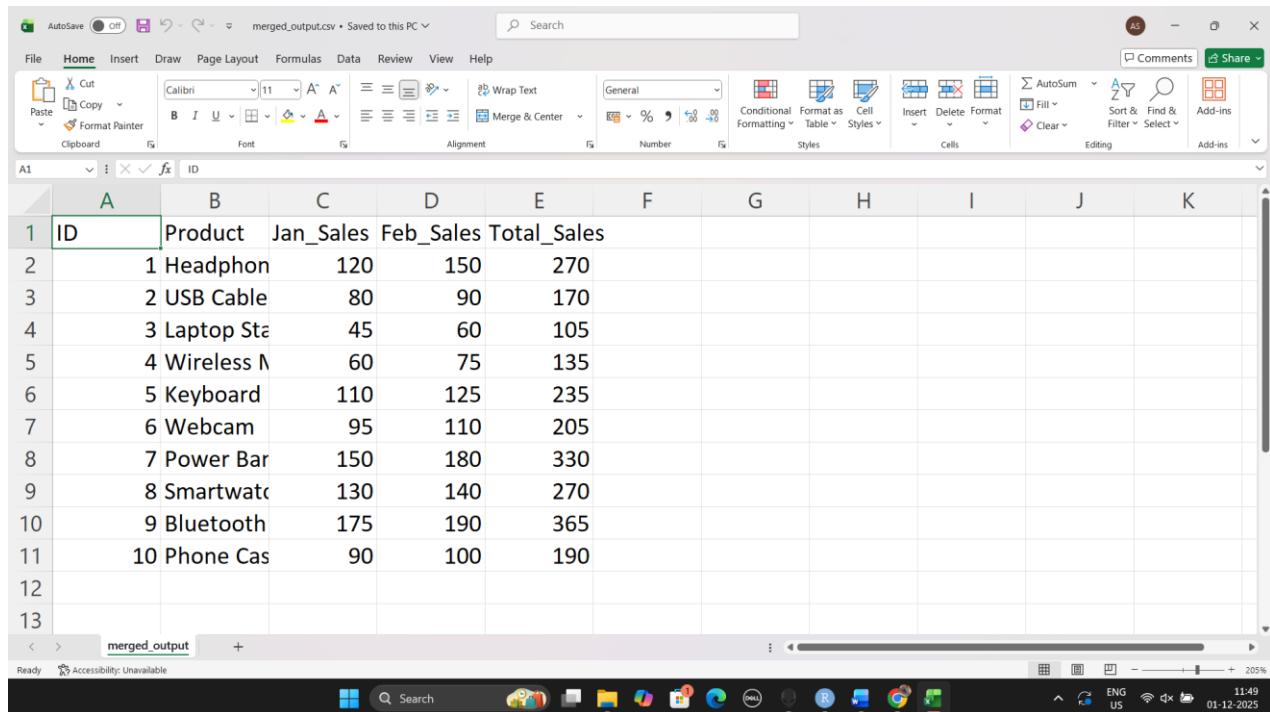


The screenshot shows the RStudio interface with the following details:

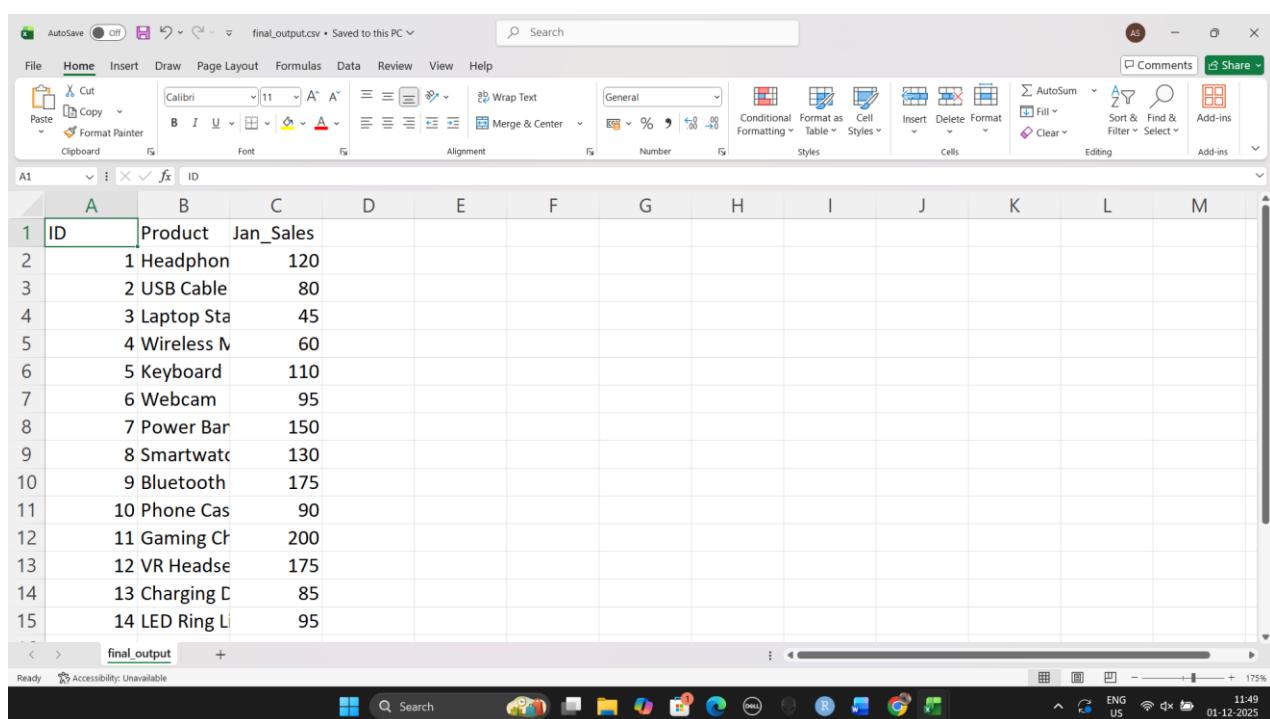
- File Menu:** File, Edit, Code, View, Plots, Session, Build, Debug, Profile, Tools, Help.
- Toolbar:** Source on Save, Go to file/function, Run, Source.
- Console Tab:** Shows R code and error messages. The code attempts to read CSV files for January, February, and new products. It merges them and calculates total sales. The error message indicates that the file 'amazon_february_sales_big.csv' cannot be found.
- Terminal Tab:** Shows the same error message for the new products file.
- Background Jobs Tab:** Shows the same error message for the January file.
- R Script Tab:** Shows the full R code for the analysis.
- Environment Tab:** Shows the global environment with various objects like data_jan, data_new, feb, final, final_list, jan, merged, merged_data, and new.
- Files Tab:** Shows a list of files in the current directory, including R scripts, CSV files, and other data files.
- System Taskbar:** Shows the date (01-12-2025), time (11:48), and system status (ENG US).

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	A	B	C	D	E	F	G	H	I	J	K
1	ID	Product	Jan_Sales	Feb_Sales	Total_Sales						
2	1	Headphon	120	150	270						
3	2	USB Cable	80	90	170						
4	3	Laptop Sta	45	60	105						
5	4	Wireless N	60	75	135						
6	5	Keyboard	110	125	235						
7	6	Webcam	95	110	205						
8	7	Power Bar	150	180	330						
9	8	Smartwatch	130	140	270						
10	9	Bluetooth	175	190	365						
11	10	Phone Cas	90	100	190						



	A	B	C	D	E	F	G	H	I	J	K	L	M
1	ID	Product	Jan_Sales										
2	1	Headphon	120										
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6	5	Keyboard	110										
7	6	Webcam	95										
8	7	Power Bar	150										
9	8	Smartwatch	130										
10	9	Bluetooth	175										
11	10	Phone Cas	90										
12	11	Gaming Cl	200										
13	12	VR Headse	175										
14	13	Charging C	85										
15	14	LED Ring Li	95										

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