RGui - [R Console]

File Edit View Misc Packages Windows Help

```
> if (!("AgeGroup" %in% names(diabetes_clean))) {
+   stop("Failed to create 'AgeGroup' column")
+ }
Error: object 'diabetes_clean' not found
>
> # Average blood pressure by age group
> bp_by_age <- diabetes_clean %>%
+   group_by(AgeGroup) %>%
+   summarise(AvgBloodPressure = mean(BloodPressure, na.rm = TRUE))
Error: object 'diabetes_clean' not found
>
> # Check if bp_by_age is empty
> if (nrow(bp_by_age) == 0) {
+   stop("No data available for average blood pressure by age group")
+ }
Error: object 'bp_by_age' not found
>
> # Bar chart of average blood pressure by age group
> ggplot(bp_by_age, aes(x = AgeGroup, y = AvgBloodPressure)) +
+   geom_bar(stat = "identity", fill = "steelblue") +
+   labs(title = "Average Blood Pressure by Age Group",
+        x = "Age Group",
+        y = "Average Blood Pressure") +
+   theme_minimal()
Error: object 'bp_by_age' not found
> emp.data <- data.frame(
+   emp_id = c(1:5),
+   emp_name = c("Ricky", "Danish", "Mini", "Ryan", "Gary"),
+   salary = c(643.3, 515.2, 671.0, 729.0, 943.25),
+   start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11", "2015-03-27")),
+   stringsAsFactors = FALSE
+ )
> print(emp.data)
  emp_id emp_name salary start_date
1      1    Ricky 643.30 2012-01-01
2      2   Danish 515.20 2013-09-23
3      3     Mini 671.00 2014-11-15
4      4     Ryan 729.00 2014-05-11
5      5     Gary 943.25 2015-03-27
>
```

RGui - [R Console]

File Edit View Misc Packages Windows Help

```
> bp_by_age <- diabetes_clean %>%
+   group_by(AgeGroup) %>%
+   summarise(AvgBloodPressure = mean(BloodPressure, na.rm = TRUE))
Error: object 'diabetes_clean' not found
>
> # Check if bp_by_age is empty
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+   stop("No data available for average blood pressure by age group")
+ }
Error: object 'bp_by_age' not found
>
> # Bar chart of average blood pressure by age group
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+   geom_bar(stat = "identity", fill = "steelblue") +
+   labs(title = "Average Blood Pressure by Age Group",
+        x = "Age Group",
+        y = "Average Blood Pressure") +
+   theme_minimal()
Error: object 'bp_by_age' not found
> emp.data <- data.frame(
+   emp_id = c(1:5),
+   emp_name = c("Ricky", "Danish", "Mini", "Ryan", "Gary"),
+   salary = c(643.3, 515.2, 671.0, 729.0, 943.25),
+   start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11", "2015-03-27")),
+   stringsAsFactors = FALSE
+ )
> print(emp.data)
  emp_id emp_name salary start_date
1      1    Ricky 643.30 2012-01-01
2      2   Danish 515.20 2013-09-23
3      3     Mini 671.00 2014-11-15
4      4     Ryan 729.00 2014-05-11
5      5     Gary 943.25 2015-03-27
> str(emp.data)
'data.frame':   5 obs. of  4 variables:
 $ emp_id    : int  1 2 3 4 5
 $ emp_name  : chr  "Ricky" "Danish" "Mini" "Ryan" ...
 $ salary    : num  643 515 671 729 943
 $ start_date: Date, format: "2012-01-01" "2013-09-23" "2014-11-15" "2014-05-11" ...
>
```
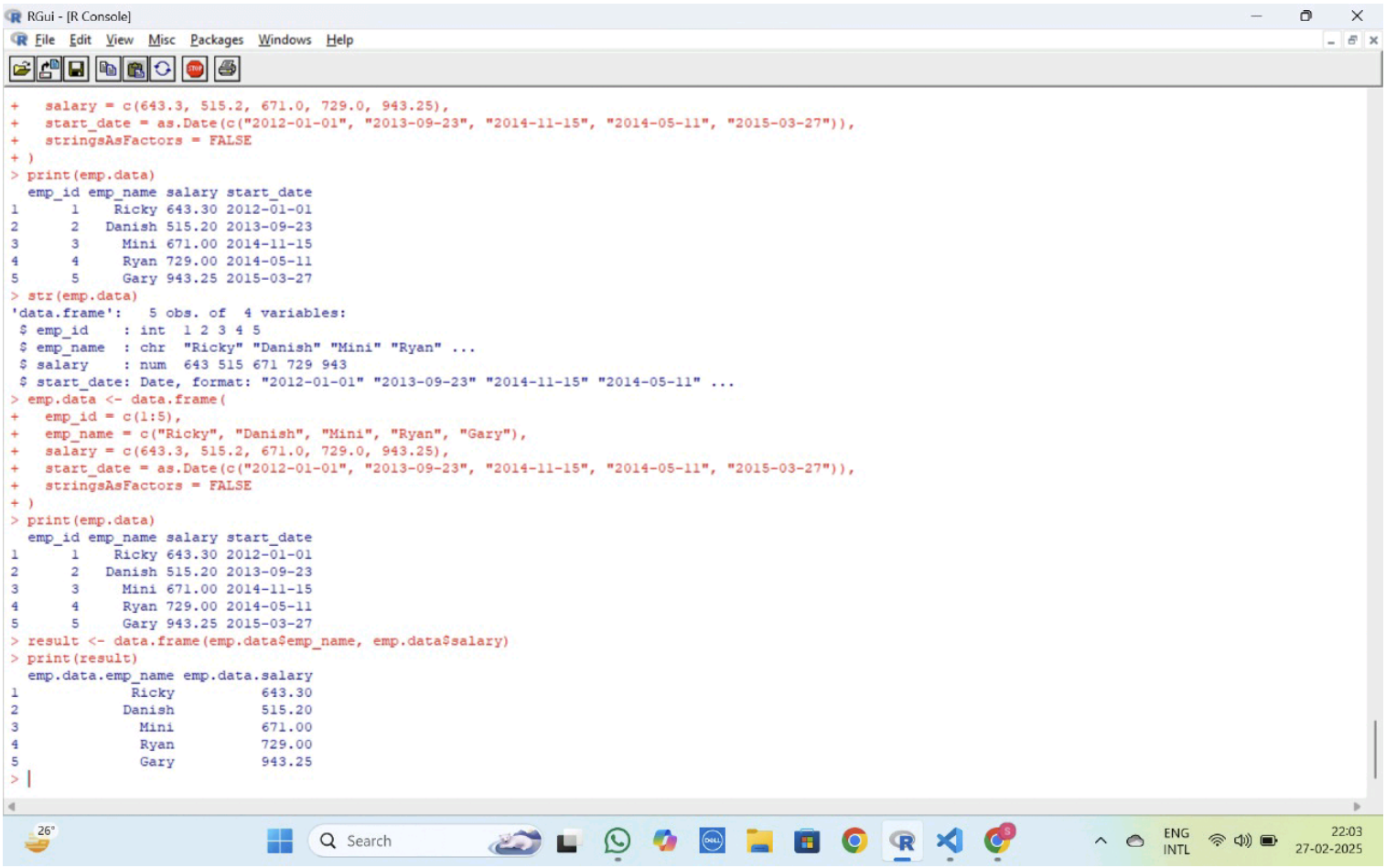
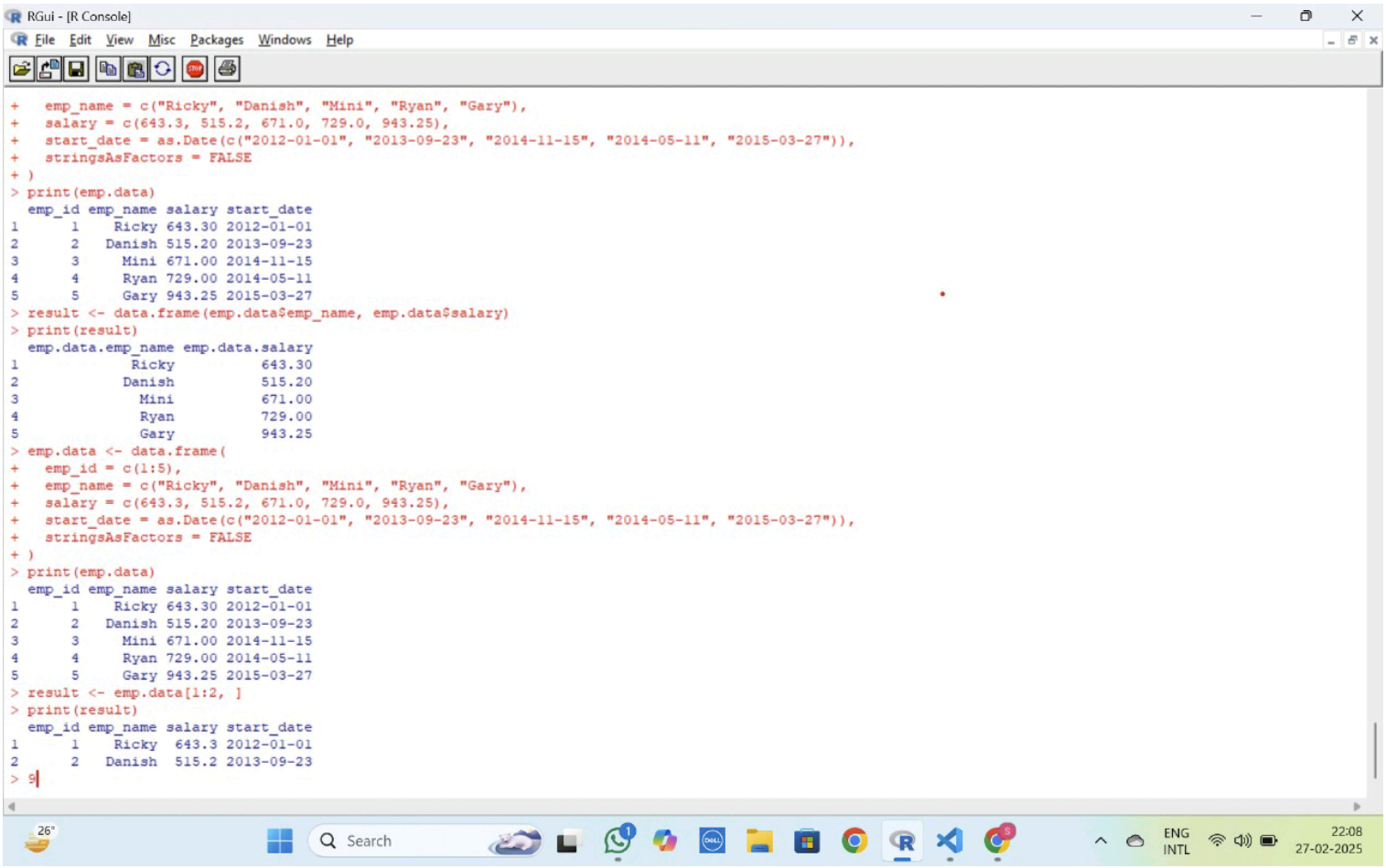


RGui - [R Console]
File Edit View Misc Packages Windows Help
+ salary = c(643.3, 515.2, 671.0, 729.0, 943.25),
+ start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11", "2015-03-27")),
+ stringsAsFactors = FALSE
+)
> print(emp.data)
emp_id emp_name salary start_date
1 1 Ricky 643.30 2012-01-01
2 2 Danish 515.20 2013-09-23
3 3 Mini 671.00 2014-11-15
4 4 Ryan 729.00 2014-05-11
5 5 Gary 943.25 2015-03-27
> str(emp.data)
'data.frame': 5 obs. of 4 variables:
$ emp_id : int 1 2 3 4 5
$ emp_name : chr "Ricky" "Danish" "Mini" "Ryan" ...
$ salary : num 643 515 671 729 943
$ start_date: Date, format: "2012-01-01" "2013-09-23" "2014-11-15" "2014-05-11" ...
> emp.data <- data.frame(
+ emp_id = c(1:5),
+ emp_name = c("Ricky", "Danish", "Mini", "Ryan", "Gary"),
+ salary = c(643.3, 515.2, 671.0, 729.0, 943.25),
+ start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11", "2015-03-27")),
+ stringsAsFactors = FALSE
+)
> print(emp.data)
emp_id emp_name salary start_date
1 1 Ricky 643.30 2012-01-01
2 2 Danish 515.20 2013-09-23
3 3 Mini 671.00 2014-11-15
4 4 Ryan 729.00 2014-05-11
5 5 Gary 943.25 2015-03-27
> result <- data.frame(emp.data$emp_name, emp.data$salary)
> print(result)
emp.data.emp_name emp.data.salary
1 Ricky 643.30
2 Danish 515.20
3 Mini 671.00
4 Ryan 729.00
5 Gary 943.25
>
Search
ENG
INTL
22:03
27-02-2025


RGui - [R Console]
File Edit View Misc Packages Windows Help
+ emp_name = c("Ricky", "Danish", "Mini", "Ryan", "Gary"),
+ salary = c(643.3, 515.2, 671.0, 729.0, 943.25),
+ start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11", "2015-03-27")),
+ stringsAsFactors = FALSE
+)
> print(emp.data)
emp_id emp_name salary start_date
1 1 Ricky 643.30 2012-01-01
2 2 Danish 515.20 2013-09-23
3 3 Mini 671.00 2014-11-15
4 4 Ryan 729.00 2014-05-11
5 5 Gary 943.25 2015-03-27
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> print(result)
emp.data.emp_name emp.data.salary
1 Ricky 643.30
2 Danish 515.20
3 Mini 671.00
4 Ryan 729.00
5 Gary 943.25
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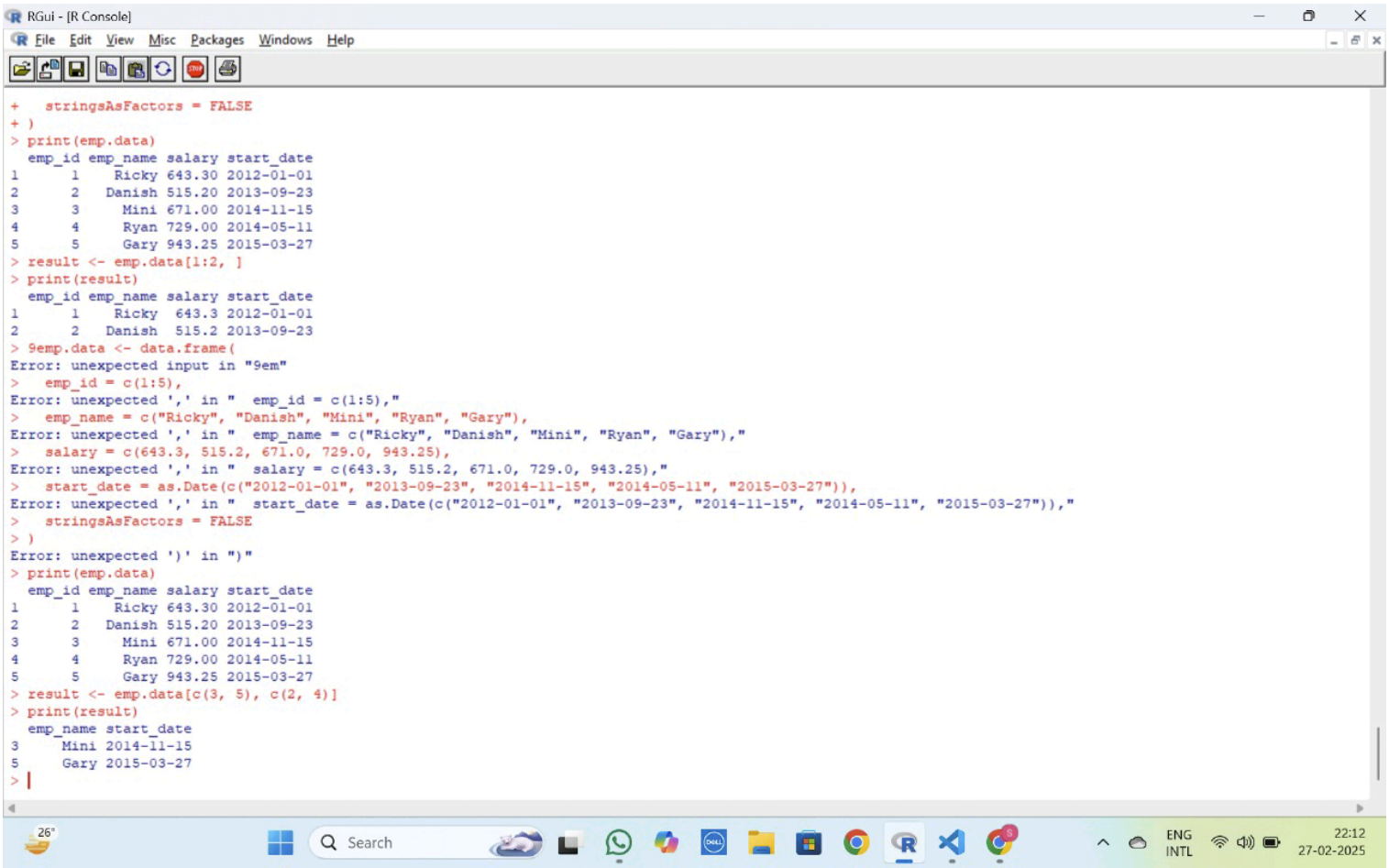
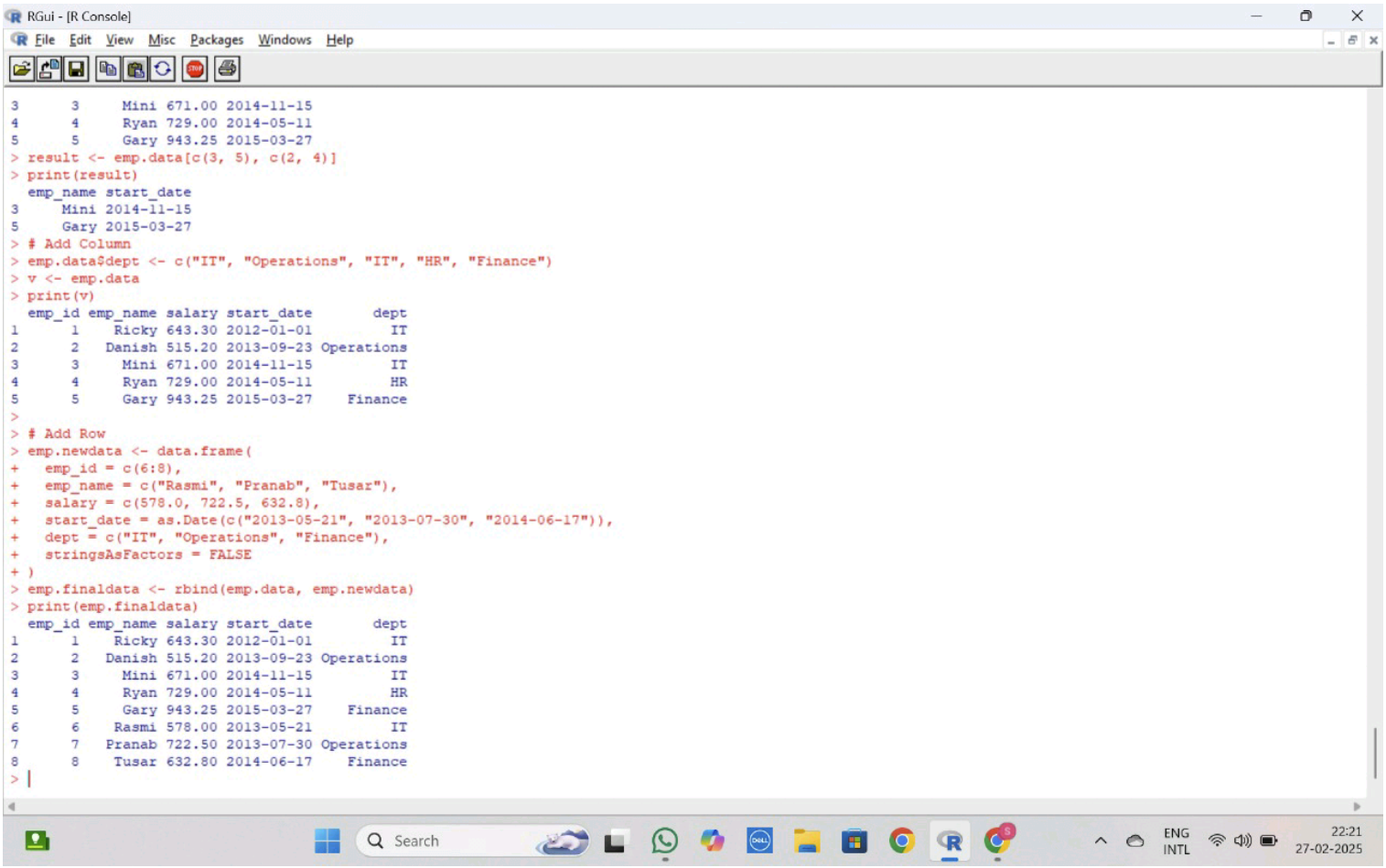
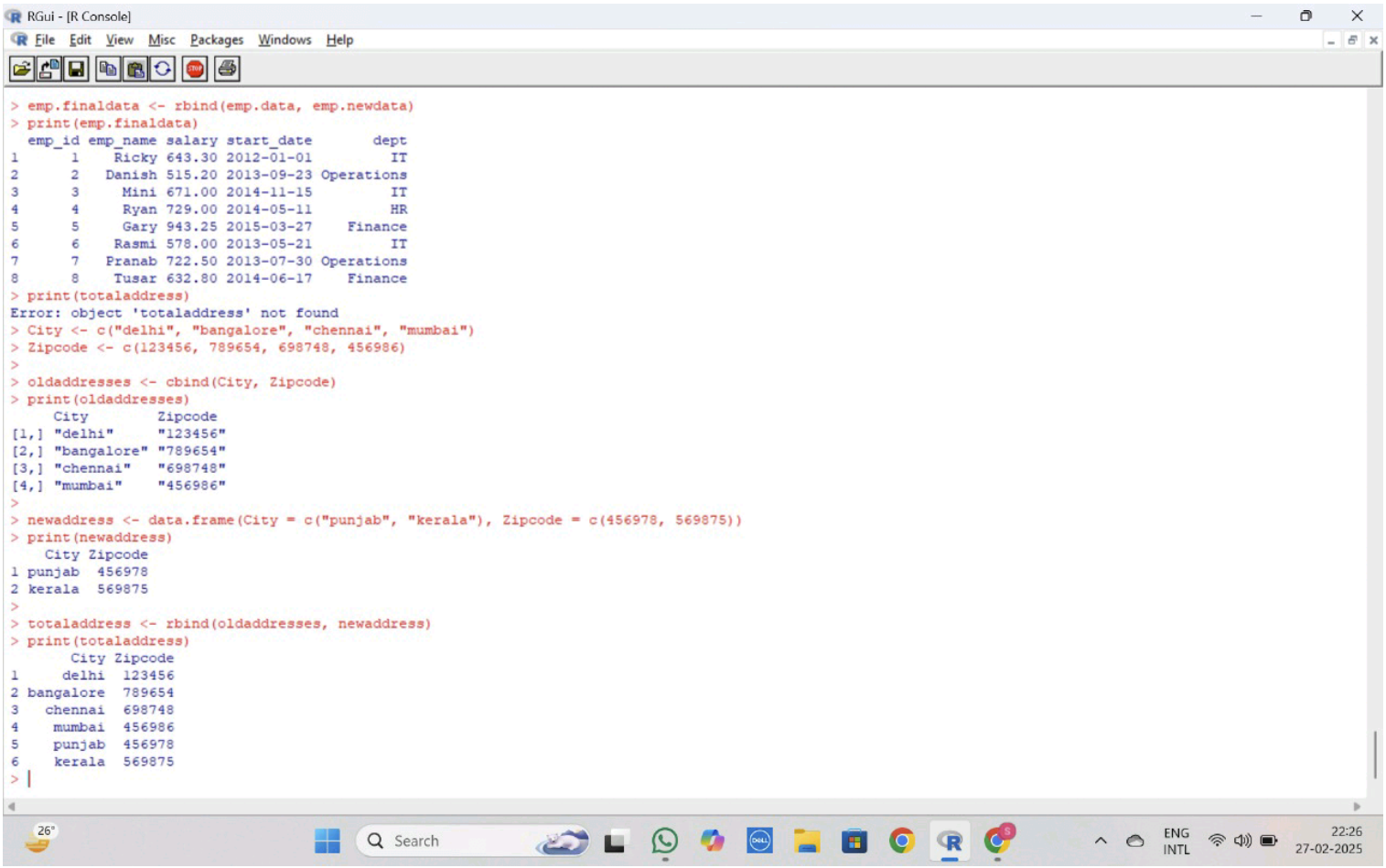
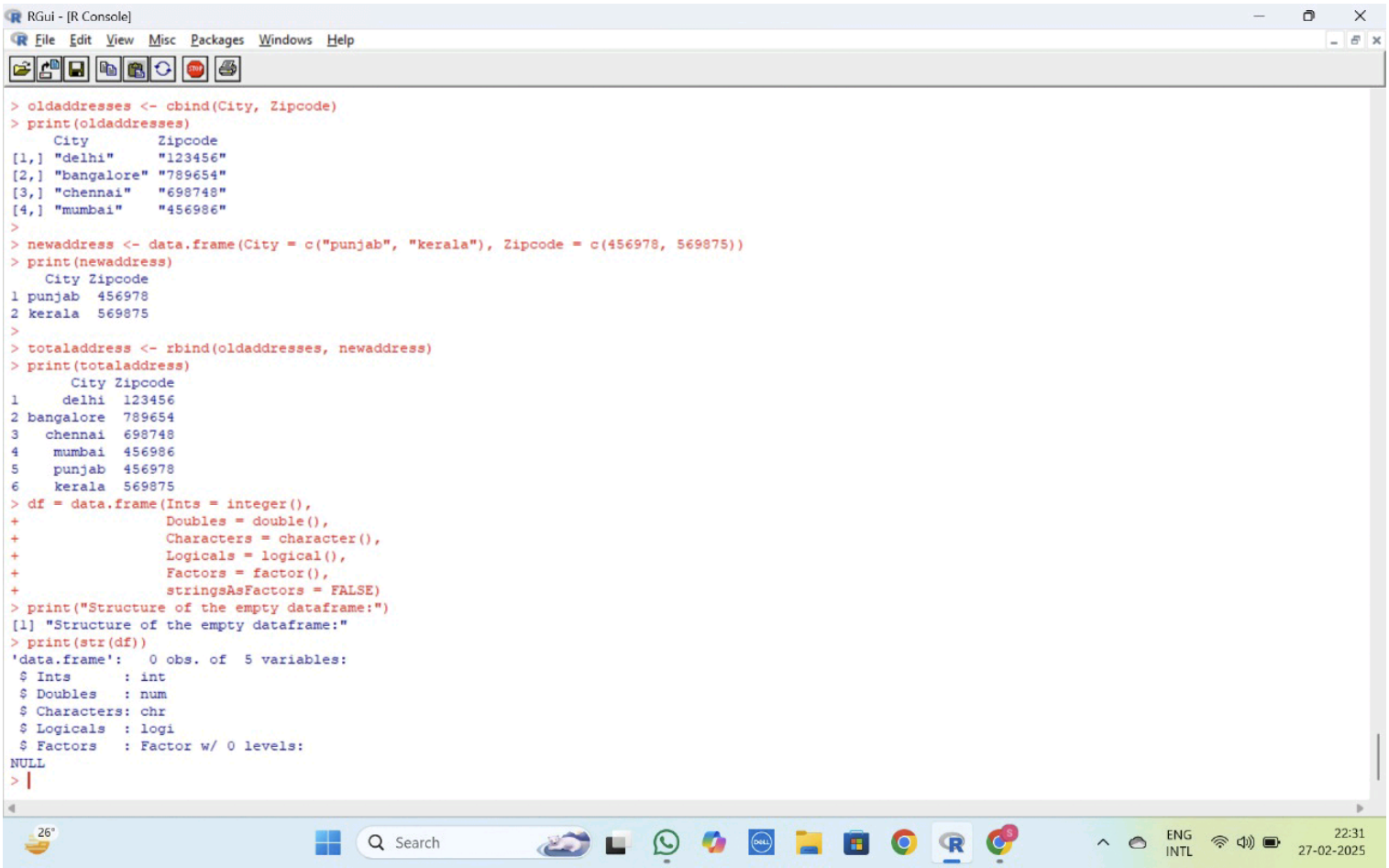
+ emp_name = c("Ricky", "Danish", "Mini", "Ryan", "Gary"),
+ salary = c(643.3, 515.2, 671.0, 729.0, 943.25),
+ start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11", "2015-03-27")),
+ stringsAsFactors = FALSE
+)
> print(emp.data)
emp_id emp_name salary start_date
1 1 Ricky 643.30 2012-01-01
2 2 Danish 515.20 2013-09-23
3 3 Mini 671.00 2014-11-15
4 4 Ryan 729.00 2014-05-11
5 5 Gary 943.25 2015-03-27
> result <- emp.data[1:2,]
> print(result)
emp_id emp_name salary start_date
1 1 Ricky 643.3 2012-01-01
2 2 Danish 515.2 2013-09-23
> 9
Search
ENG
INTL
22:08
27-02-2025


RGui - [R Console]
File Edit View Misc Packages Windows Help
+ stringsAsFactors = FALSE
+)
> print(emp.data)
emp_id emp_name salary start_date
1 1 Ricky 643.30 2012-01-01
2 2 Danish 515.20 2013-09-23
3 3 Mini 671.00 2014-11-15
4 4 Ryan 729.00 2014-05-11
5 5 Gary 943.25 2015-03-27
> result <- emp.data[1:2,]
> print(result)
emp_id emp_name salary start_date
1 1 Ricky 643.3 2012-01-01
2 2 Danish 515.2 2013-09-23
> 9emp.data <- data.frame(
Error: unexpected input in "9em"
> emp_id = c(1:5),
Error: unexpected ',' in " emp_id = c(1:5),"
> emp_name = c("Ricky", "Danish", "Mini", "Ryan", "Gary"),
Error: unexpected ',' in " emp_name = c("Ricky", "Danish", "Mini", "Ryan", "Gary"),"
> salary = c(643.3, 515.2, 671.0, 729.0, 943.25),
Error: unexpected ',' in " salary = c(643.3, 515.2, 671.0, 729.0, 943.25),"
> start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11", "2015-03-27")),
Error: unexpected ',' in " start_date = as.Date(c("2012-01-01", "2013-09-23", "2014-11-15", "2014-05-11", "2015-03-27")),"
> stringsAsFactors = FALSE
>)
Error: unexpected ')' in ")"
> print(emp.data)
emp_id emp_name salary start_date
1 1 Ricky 643.30 2012-01-01
2 2 Danish 515.20 2013-09-23
3 3 Mini 671.00 2014-11-15
4 4 Ryan 729.00 2014-05-11
5 5 Gary 943.25 2015-03-27
> result <- emp.data[c(3, 5), c(2, 4)]
> print(result)
emp_name start_date
3 Mini 2014-11-15
5 Gary 2015-03-27
>
26°
Search
ENG
INTL
22:12
27-02-2025


RGui - [R Console]
File Edit View Misc Packages Windows Help
3 3 Mini 671.00 2014-11-15
4 4 Ryan 729.00 2014-05-11
5 5 Gary 943.25 2015-03-27
> result <- emp.data[c(3, 5), c(2, 4)]
> print(result)
emp_name start_date
3 Mini 2014-11-15
5 Gary 2015-03-27
> # Add Column
> emp.data$dept <- c("IT", "Operations", "IT", "HR", "Finance")
> v <- emp.data
> print(v)
emp_id emp_name salary start_date dept
1 1 Ricky 643.30 2012-01-01 IT
2 2 Danish 515.20 2013-09-23 Operations
3 3 Mini 671.00 2014-11-15 IT
4 4 Ryan 729.00 2014-05-11 HR
5 5 Gary 943.25 2015-03-27 Finance
> # Add Row
> emp.newdata <- data.frame(
+ emp_id = c(6:8),
+ emp_name = c("Rasmi", "Pranab", "Tusar"),
+ salary = c(578.0, 722.5, 632.8),
+ start_date = as.Date(c("2013-05-21", "2013-07-30", "2014-06-17")),
+ dept = c("IT", "Operations", "Finance"),
+ stringsAsFactors = FALSE
+)
> emp.finaldata <- rbind(emp.data, emp.newdata)
> print(emp.finaldata)
emp_id emp_name salary start_date dept
1 1 Ricky 643.30 2012-01-01 IT
2 2 Danish 515.20 2013-09-23 Operations
3 3 Mini 671.00 2014-11-15 IT
4 4 Ryan 729.00 2014-05-11 HR
5 5 Gary 943.25 2015-03-27 Finance
6 6 Rasmi 578.00 2013-05-21 IT
7 7 Pranab 722.50 2013-07-30 Operations
8 8 Tusar 632.80 2014-06-17 Finance
Search
ENG INTL
22:21 27-02-2025


RGui - [R Console]
File Edit View Misc Packages Windows Help
> emp.finaldata <- rbind(emp.data, emp.newdata)
> print(emp.finaldata)
emp_id emp_name salary start_date dept
1 1 Ricky 643.30 2012-01-01 IT
2 2 Danish 515.20 2013-09-23 Operations
3 3 Mini 671.00 2014-11-15 IT
4 4 Ryan 729.00 2014-05-11 HR
5 5 Gary 943.25 2015-03-27 Finance
6 6 Rasmi 578.00 2013-05-21 IT
7 7 Pranab 722.50 2013-07-30 Operations
8 8 Tusar 632.80 2014-06-17 Finance
> print(totaladdress)
Error: object 'totaladdress' not found
> City <- c("delhi", "bangalore", "chennai", "mumbai")
> Zipcode <- c(123456, 789654, 698748, 456986)
>
> oldaddresses <- cbind(City, Zipcode)
> print(oldaddresses)
City Zipcode
[1,] "delhi" "123456"
[2,] "bangalore" "789654"
[3,] "chennai" "698748"
[4,] "mumbai" "456986"
>
> newaddress <- data.frame(City = c("punjab", "kerala"), Zipcode = c(456978, 569875))
> print(newaddress)
City Zipcode
1 punjab 456978
2 kerala 569875
>
> totaladdress <- rbind(oldaddresses, newaddress)
> print(totaladdress)
City Zipcode
1 delhi 123456
2 bangalore 789654
3 chennai 698748
4 mumbai 456986
5 punjab 456978
6 kerala 569875
>
26°
Search
ENG
INTL
22:26
27-02-2025


RGui - [R Console]
File Edit View Misc Packages Windows Help
> oldaddresses <- cbind(City, Zipcode)
> print(oldaddresses)
City Zipcode
[1,] "delhi" "123456"
[2,] "bangalore" "789654"
[3,] "chennai" "698748"
[4,] "mumbai" "456986"
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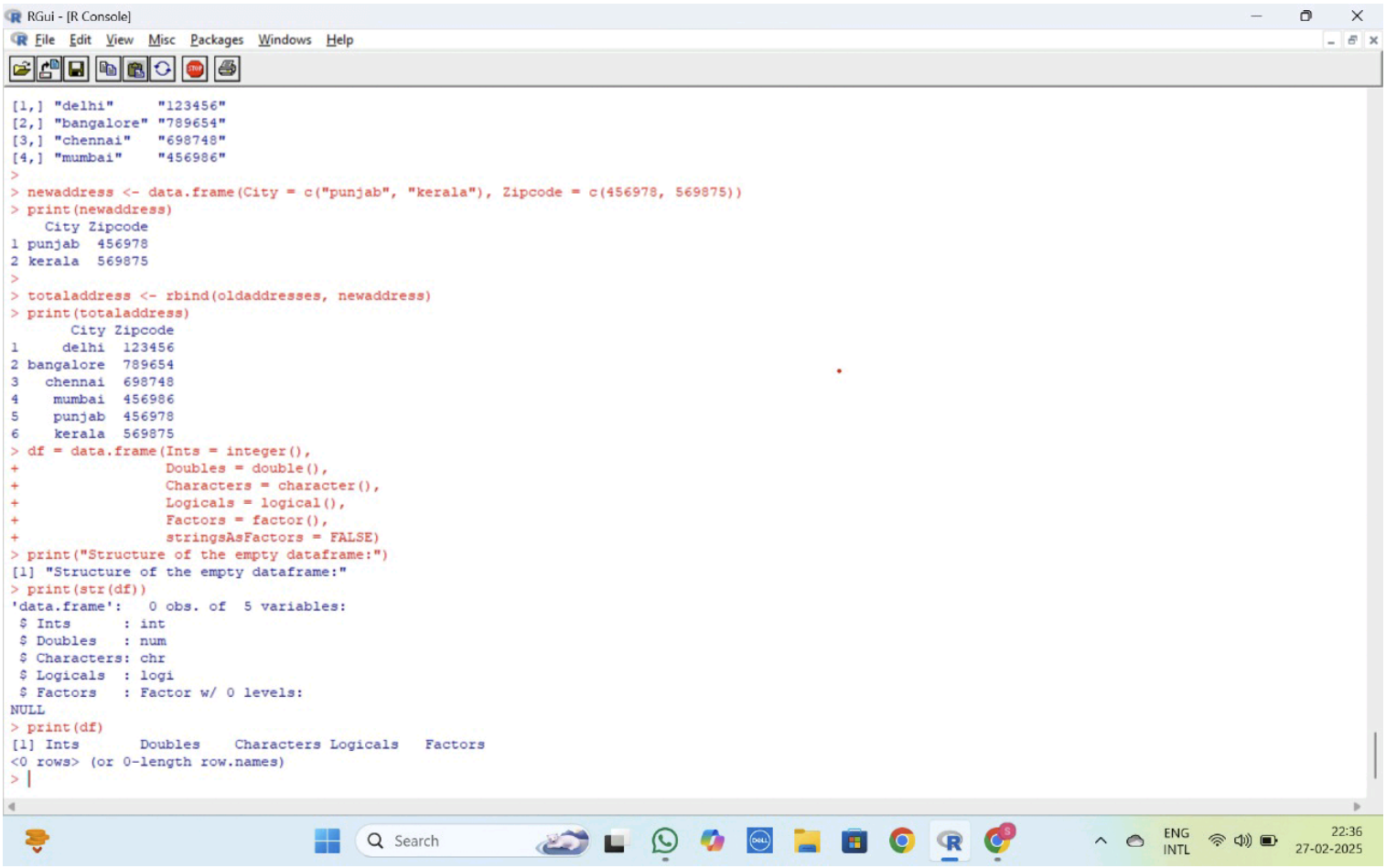
> print(newaddress)
City Zipcode
1 punjab 456978
2 kerala 569875
> totaladdress <- rbind(oldaddresses, newaddress)
> print(totaladdress)
City Zipcode
1 delhi 123456
2 bangalore 789654
3 chennai 698748
4 mumbai 456986
5 punjab 456978
6 kerala 569875
> df = data.frame(Ints = integer(),
+ Doubles = double(),
+ Characters = character(),
+ Logicals = logical(),
+ Factors = factor(),
+ stringsAsFactors = FALSE)
> print("Structure of the empty dataframe:")
[1] "Structure of the empty dataframe:"
> print(str(df))
'data.frame': 0 obs. of 5 variables:
$ Ints : int
$ Doubles : num
$ Characters: chr
$ Logicals : logi
$ Factors : Factor w/ 0 levels:
NULL
>
26°
Search
ENG
INTL
22:31
27-02-2025


RGui - [R Console]
File Edit View Misc Packages Windows Help
[1,] "delhi" "123456"
[2,] "bangalore" "789654"
[3,] "chennai" "698748"
[4,] "mumbai" "456986"
> newaddress <- data.frame(City = c("punjab", "kerala"), Zipcode = c(456978, 569875))
> print(newaddress)
City Zipcode
1 punjab 456978
2 kerala 569875
> totaladdress <- rbind(oldaddresses, newaddress)
> print(totaladdress)
City Zipcode
1 delhi 123456
2 bangalore 789654
3 chennai 698748
4 mumbai 456986
5 punjab 456978
6 kerala 569875
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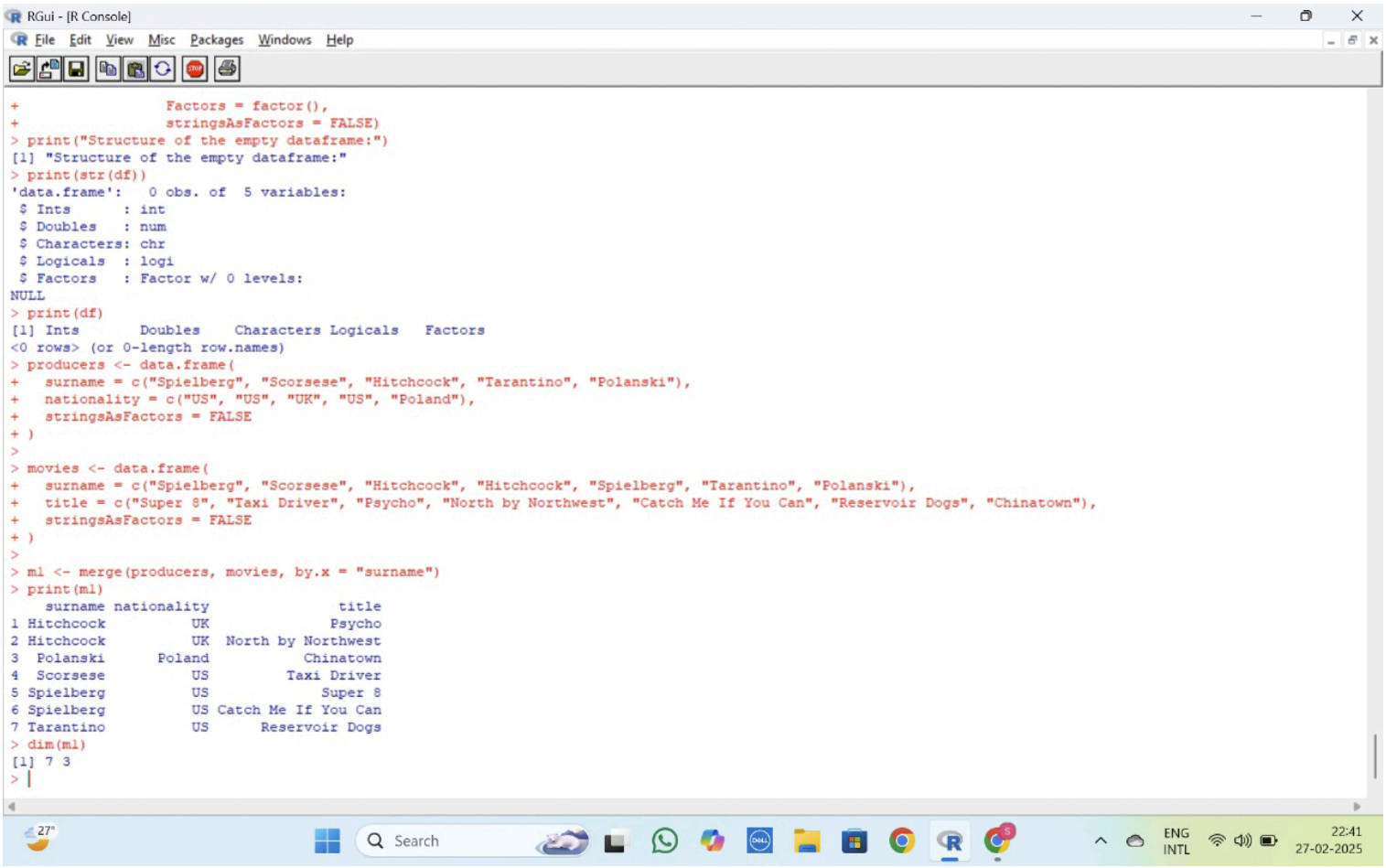
+ Doubles = double(),
+ Characters = character(),
+ Logicals = logical(),
+ Factors = factor(),
+ stringsAsFactors = FALSE)
> print("Structure of the empty dataframe:")
[1] "Structure of the empty dataframe:"
> print(str(df))
'data.frame': 0 obs. of 5 variables:
$ Ints : int
$ Doubles : num
$ Characters: chr
$ Logicals : logi
$ Factors : Factor w/ 0 levels:
NULL
> print(df)
[1] Ints Doubles Characters Logicals Factors
<0 rows> (or 0-length row.names)
Search
ENG
INTL
22:36
27-02-2025


RGui - [R Console]
File Edit View Misc Packages Windows Help
+ Factors = factor(),
+ stringsAsFactors = FALSE)
> print("Structure of the empty dataframe:")
[1] "Structure of the empty dataframe:"
> print(str(df))
'data.frame': 0 obs. of 5 variables:
$ Ints : int
$ Doubles : num
$ Characters: chr
$ Logicals : logi
$ Factors : Factor w/ 0 levels:
NULL
> print(df)
[1] Ints Doubles Characters Logicals Factors
<0 rows> (or 0-length row.names)
> producers <- data.frame(
+ surname = c("Spielberg", "Scorsese", "Hitchcock", "Tarantino", "Polanski"),
+ nationality = c("US", "US", "UK", "US", "Poland"),
+ stringsAsFactors = FALSE
+)
>
> movies <- data.frame(
+ surname = c("Spielberg", "Scorsese", "Hitchcock", "Hitchcock", "Spielberg", "Tarantino", "Polanski"),
+ title = c("Super 8", "Taxi Driver", "Psycho", "North by Northwest", "Catch Me If You Can", "Reservoir Dogs", "Chinatown"),
+ stringsAsFactors = FALSE
+)
>
> ml <- merge(producers, movies, by.x = "surname")
> print(ml)
surname nationality title
1 Hitchcock UK Psycho
2 Hitchcock UK North by Northwest
3 Polanski Poland Chinatown
4 Scorsese US Taxi Driver
5 Spielberg US Super 8
6 Spielberg US Catch Me If You Can
7 Tarantino US Reservoir Dogs
> dim(ml)
[1] 7 3
>
27°
Search
ENG
INTL
22:41
27-02-2025