

MVLU R COLLEGE 13

Aim: Identifying and handling duplicates using distinct() (R studio).

Output:

The screenshot shows the RStudio interface with the following content:

- Console:**

```
> library(dplyr)
> # select your cricket csv file (Fastest Fifties...)
> print("--- ACTION: Please select your CRICKET CSV file ---")
[1] "--- ACTION: Please select your CRICKET CSV file ---"
> cricket_df <- read.csv(file.choose())
> print("--- 1. Original Data (First 6 Rows) ---")
[1] "--- 1. Original Data (First 6 Rows) ---"
> print(head(cricket_df))
  pos Player Runs BF X4s X6s Against Venue Match.Date
1   1   KL Rahul  51  14   6   4    DC  IS Bindra stadium 08 April 2018
2   2 Ishan Kishan  62  17   5   6   KKR  Eden gardens  09 May 2018
3   3 Sunil Narine  50  17   4   5   RCB  Eden gardens  08 April 2018
4   4 Jos Buttler  67  18   4   7    DC  Arun Jaitley Stadium 02 May 2018
5   5 Sam Billings  56  21   2   5   KKR  Chidambaram 10 April 2018
6   6   KL Rahul  66  22   2   7   KKR  Holkar Cricket Stadium 12 May 2018

> duplicates_report <- cricket_df %>%
+ # we group by the main columns to check for identical entries
+ group_by(Player, Runs, Against, Match.Date) %>%
+ count() %>%
+ filter(n > 1)
> print("--- 2. Duplicate Report (Rows appearing more than once) ---")
[1] "--- 2. Duplicate Report (Rows appearing more than once) ---"
> print(duplicates_report)
# A tibble: 0 x 5
# Groups:   Player, Runs, Against, Match.Date [0]
# i 5 variables: Player <chr>, Runs <int>, Against <chr>, Match.Date <chr>, n <int>
> clean_exact <- cricket_df %>%
+ distinct()
> print("--- 3. Removed Exact Duplicates (distinct) ---")
[1] "--- 3. Removed Exact Duplicates (distinct) ---"
> print(paste("Original Rows:", nrow(cricket_df)))
[1] "Original Rows: 106"
> print(paste("Cleaned Rows:", nrow(clean_exact)))
[1] "Cleaned Rows: 106"
> unique_players <- cricket_df %>%
```
- Environment:** Lists objects in the Global Environment: `runs_by_opponent` (8 obs. of 5 variables), `selected_cols` (106 obs. of 9 variables), `starts_with_p` (106 obs. of 9 variables), `team_lookup` (8 obs. of 2 variables), `tidy_cricket` (106 obs. of 11 variables), `unique_customers` (4 obs. of 3 variables), `unique_players` (41 obs. of 9 variables).
- Files:** Shows a list of files in the Home directory, including `tue_sales.csv`, `GIS DataBase`, `IIExpress`, `My Music`, `My Pictures`, `My Videos`, `My Web Sites`, `R`, `SM PRACTICAL - II 20.txt`, `SM PRACTICAL - II.txt`, `total_bills.csv`, `Virtual Machines`, `Visual Studio 2022`, and `WindowsPowerShell`.

The screenshot shows the RStudio interface with the following content:

- Console:**

```
> unique_players <- cricket_df %>%
+ distinct(Player, .keep_all = TRUE)
> print("--- 4. Unique Players List (Partial Duplicates removed) ---")
[1] "--- 4. Unique Players List (Partial Duplicates removed) ---"
> # This will show Yusuf Pathan only once (the first time he appears)
> print(head(unique_players))
  pos Player Runs BF X4s X6s Against Venue Match.Date
1   1   KL Rahul  51  14   6   4    DC  IS Bindra stadium 08 April 2018
2   2 Ishan Kishan  62  17   5   6   KKR  Eden gardens  09 May 2018
3   3 Sunil Narine  50  17   4   5   RCB  Eden gardens  08 April 2018
4   4 Jos Buttler  67  18   4   7    DC  Arun Jaitley stadium 02 May 2018
5   5 Sam Billings  56  21   2   5   KKR  Chidambaram 10 April 2018
6   7 Chris Gayle  63  22   7   4   CSK  IS Bindra stadium 15 April 2018
```
- Environment:** The `unique_players` object is now listed in the Environment pane with 41 observations and 9 variables.
- Files:** The file list remains the same as in the previous screenshot.