

**SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE**  
**SUBJECT - Data Analysis with SAS / SPSS / R**

Aim - Sorting data using arrange() in R.

```
> library(ggplot2)
> # Load your IPL Season 12 team-level dataset
> pkl <- read.csv("team_record.csv")
> pkl_sorted_totalpts <- pkl |>
+ arrange(desc(totalpts))
> head(pkl_sorted_totalpts, 5)

  Team Matches_played Matches_lost Total_pts Avg_pts Successful_raids Successful_tackles Raid_pts
1 Gujarat Giants      18         6      12    377    32.06      247      170    119
2 UP Yodhas      18         7      11    386    33.11      284      158    185
3 Tamil Thalaivas      18         6      12    621    34.50      285      182    154
4 V Mumba      18         8      8    683    38.00      288      194    152
5 Jaipur Pink Panthers      20         9      11    685    33.25      330      171    180

  Tackle_pts Avg_raids_pts Avg_tackle_pts Super_tackles Dbl_raids_pts Total_pts_conceded Super_raids Total_raids
1 181      17.72      39.60      23      53      682      5      781
2 184      28.28      9.11      6      43      686      13      782
3 185      18.87      39.83      14      42      616      8      738
4 259      18.51      31.31      27      47      687      12      807
5 188      18.29      9.68      19      49      715      9      830

  All_outs_inflicted All_outs_conceded
1 18      21
2 17      28
3 25      27
4 28      25
5 25      28

> pkl_sorted_matches_lost <- pkl |>
+ arrange(desc(Matches_lost))
> head(pkl_sorted_matches_lost, 5)

  Team Matches_played Matches_lost Total_pts Avg_pts Successful_raids Successful_tackles Raid_pts
1 Dabang Delhi DC      20      15      5    750    37.50      289      208      395
2 PUNEVI Paltan      21      14      7    792    37.71      351      228      478
3 Telugu Titans      21      12      9    788    37.57      356      208      418
4 Bengaluru Bulls      20      11      8    725    36.25      368      201      436
5 Patna Pirates      22      10      11    844    38.36      413      287      518

  Tackle_pts Avg_raids_pts Avg_tackle_pts Super_tackles Dbl_raids_pts Total_pts_conceded Super_raids Total_raids
1 287      18.75      10.35      10      65      681      20      796
2 244      28.80      11.62      27      52      728      11      844
3 223      20.05      11.05      19      58      682      7      815
4 223      21.42      11.74      18      43      789      8      798
5 237      21.82      10.81      18      63      744      8      864
6 218      28.33      11.53      27      47      687      11      807
7 293      28.25      9.38      22      65      812      11      912
8 188      29.25      9.40      18      45      735      9      838
9 264      30.28      9.11      6      43      686      11      762
10 368      25.67      8.89      18      24      687      8      750

  All_outs_inflicted All_outs_conceded
1 30      29
2 39      29
3 28      21
4 31      30
5 28      28
6 39      25
7 35      24
8 21      28
9 37      28
10 29      14

> strong_raiders_sorted <- pkl |>
+ filter(Successful_raids > 200) |>
+ arrange(desc(Successful_tackles))
> catc("Top raiding teams sorted by successful tackles:\n")
> printC
> strong_raiders_sorted |>
```

The screenshot displays the RStudio interface. The left pane shows the R console with code for loading the IPL dataset, sorting it by total points, and then by matches lost. The top-right pane shows the first data frame, which contains team-level statistics. The bottom-right pane shows the second data frame, which contains individual player statistics. The code uses the pipe operator (|>) and the arrange() function to sort the data. The output shows the top teams and players based on the specified criteria.

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The screenshot displays an RStudio interface with the following components:

- Environment Pane (Top Right):** Lists data objects including `female_sury` (231 obs. of 12 variables), `first_w_s` (408 obs. of 12 variables), `high_fans` (176 obs. of 12 variables), `my_data` (118590 obs. of 36 variables), `pk1` (12 obs. of 29 variables), `pk1_multi` (12 obs. of 29 variables), `pk1_sorted` (12 obs. of 29 variables), `pk1_sorted` (12 obs. of 29 variables), and `strong_raids` (12 obs. of 29 variables).
- Console (Bottom Left):** Contains the following R code:
 

```

> all_outs_inflicted All_outs_canceled
1      30      20
2      39      29
3      28      21
4      31      30
5      28      28
6      29      25
7      35      24
8      21      28
9      17      28
10     29      34

> strong_raiders_sorted <- pk1 |>
+ filter(succesful_raids > 200) |>
+ arrange(succesful_tackles)
> cat("Top raiding team sorted by succesful tackles:\n")
Top raiding team sorted by succesful tackles:
> print()
+ strong_raiders_sorted |>
+ select(Team, succesful_raids, succesful_tackles, Total_pts) |>
+ head(5)
+ }

      Team succesful_raids succesful_tackles Total_pts
1 Bengal warriors      368          146         698
2 BP vaddhu          264          159         596
3 Gajrat Giants      247          170         577
4 Jaipur Pink Panthers 339          171         665
5 Tamil Thelavoo     285          182         621
      
```
- Table Output (Bottom Left):** A table showing the top raiding teams sorted by successful tackles.
 

Team	succesful_raids	succesful_tackles	Total_pts
Bengal warriors	368	146	698
BP vaddhu	264	159	596
Gajrat Giants	247	170	577
Jaipur Pink Panthers	339	171	665
Tamil Thelavoo	285	182	621