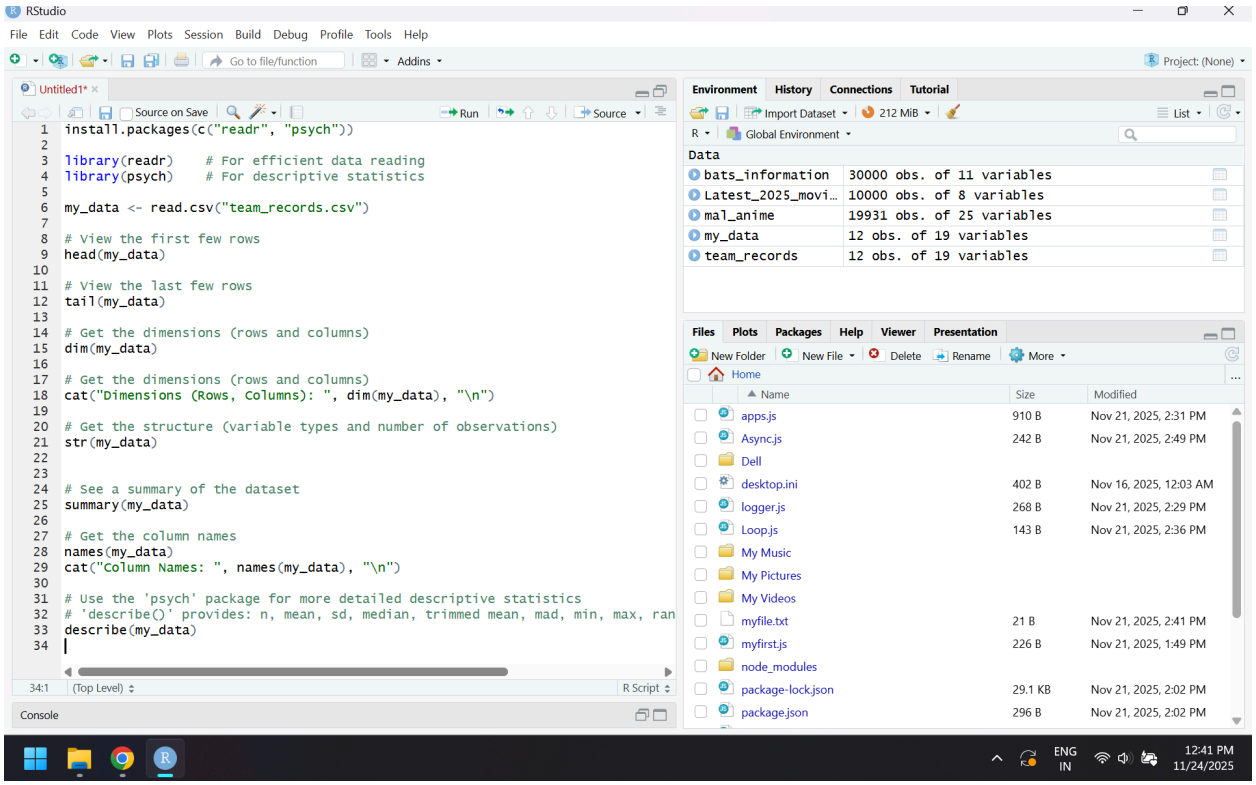
SHETH L.U.J. & SIR M.V. COLLEGE OF SCIENCE
SUBJECT - Data Analysis with SAS / SPSS / R

Aim - Exploring data: View() or print() (R).

Input :



Output :

Name - Mithil Kadam
Roll No - S083

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```
> my_data <- read.csv("team_records.csv")
> # View the first few rows
> head(my_data)
              Team Matches_played Matches_won Matches_lost Total_pts Avg_pts
1    Patna Pirates             22          10           11       844   38.36
2    Telugu Titans             21          12            9       789   37.57
3    Puneri Paltan             21          14            7       792   37.71
4 Haryana Steelers             19          10            9       724   38.11
5  Bengaluru Bulls             20          11            8       721   36.05
6  Bengal Warriorz             18           6           12       698   38.78
  Successful_raids Successful_tackles Raid_pts Tackle_pts Avg_raid_pts
1              413                187      516        201        23.25
2              356                209      458        227        21.81
3              351                220      420        244        20.00
4              321                195      407        223        21.42
5              318                203      401        221        20.05
6              369                146      462        160        25.67
  Avg_tackle_pts Super_tackles DOD_raid_pts Total_pts_conceded Super_raids
1           9.14            22           65                812          11
2          10.81            18           63                744           8
3          11.62            27           52                728          11
4          11.74            28           43                709           8
5          11.05            19           56                662           7
6           8.89            16           24                807           8
  Total_raids All_outs_inflicted All_outs_conceded
1         912                35                24
2         864                28                28
3         844                39                20
4         790                31                30
5         815                28                21
6         751                20                34
> # View the last few rows
> tail(my_data)
                Team Matches_played Matches_won Matches_lost Total_pts
7       Dabang Delhi KC             20          15            5       705
8  Jaipur Pink Panthers             20           9           11       665
9               U Mumba             19          10            9       663
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```
7       Dabang Delhi KC              20           15            5       705
8  Jaipur Pink Panthers              20            9           11       665
9               U Mumba              19           10            9       663
10      Tamil Thalaivas              18            6           12       621
11           UP Yoddhas              18            7           11       596
12         Gujrat Giants             18            6           12       577
   Avg_pts Successful_raids Successful_tackles Raid_pts Tackle_pts
7    35.25              299                199       395        207
8    33.25              310                171       385        188
9    34.89              288                194       352        219
10   34.50              285                182       354        195
11   33.11              284                159       365        164
12   32.06              247                170       319        191
   Avg_raid_pts Avg_tackle_pts Super_tackles DOD_raid_pts Total_pts_conceded
7         19.75          10.35            10           65                681
8         19.25           9.40            19           45                735
9         18.53          11.53            27           47                687
10        19.67          10.83            14           42                656
11        20.28           9.11             6           43                666
12        17.72          10.61            23           53                662
   Super_raids Total_raids All_outs_inflicted All_outs_conceded
7           20         796                 30                20
8            9         830                 21                28
9           11         807                 20                25
10           8         738                 21                27
11          11         762                 17                28
12           5         761                 18                23
> # Get the dimensions (rows and columns)
> dim(my_data)
[1] 12 19
> # Get the dimensions (rows and columns)
> cat("Dimensions (Rows, Columns): ", dim(my_data), "\n")
Dimensions (Rows, Columns):  12 19
> # Get the structure (variable types and number of observations)
> str(my_data)
'data.frame':   12 obs. of  19 variables:
```

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> # Get the dimensions (rows and columns)
> cat("Dimensions (Rows, Columns): ", dim(my_data), "\n")
Dimensions (Rows, Columns):  12 19
> # Get the structure (variable types and number of observations)
> str(my_data)
'data.frame':   12 obs. of  19 variables:
 $ Team              : chr  "Patna Pirates" "Telugu Titans" "Puneri Paltan" "Hary
ana Steelers" ...
 $ Matches_played    : int  22 21 21 19 20 18 20 20 19 18 ...
 $ Matches_won       : int  10 12 14 10 11 6 15 9 10 6 ...
 $ Matches_lost      : int  11 9 7 9 8 12 5 11 9 12 ...
 $ Total_pts         : int  844 789 792 724 721 698 705 665 663 621 ...
 $ Avg_pts           : num  38.4 37.6 37.7 38.1 36 ...
 $ Successful_raids  : int  413 356 351 321 318 369 299 310 288 285 ...
 $ Successful_tackles: int  187 209 220 195 203 146 199 171 194 182 ...
 $ Raid_pts          : int  516 458 420 407 401 462 395 385 352 354 ...
 $ Tackle_pts        : int  201 227 244 223 221 160 207 188 219 195 ...
 $ Avg_raid_pts      : num  23.2 21.8 20 21.4 20.1 ...
 $ Avg_tackle_pts    : num  9.14 10.81 11.62 11.74 11.05 ...
 $ Super_tackles     : int  22 18 27 28 19 16 10 19 27 14 ...
 $ DOD_raid_pts      : int  65 63 52 43 56 24 65 45 47 42 ...
 $ Total_pts_conceded: int  812 744 728 709 662 807 681 735 687 656 ...
 $ Super_raids       : int  11 8 11 8 7 8 20 9 11 8 ...
 $ Total_raids       : int  912 864 844 790 815 751 796 830 807 738 ...
 $ All_outs_inflicted: int  35 28 39 31 28 20 30 21 20 21 ...
 $ All_outs_conceded : int  24 28 20 30 21 34 20 28 25 27 ...
> # See a summary of the dataset
> summary(my_data)
     Team           Matches_played   Matches_won      Matches_lost
 Length:12          Min.   :18.00   Min.   : 6.000   Min.   : 5.000
 Class :character   1st Qu.:18.00   1st Qu.: 6.750   1st Qu.: 8.750
 Mode  :character   Median :19.50   Median :10.000   Median :10.000
                    Mean   :19.50   Mean   : 9.667   Mean   : 9.667
                    3rd Qu.:20.25   3rd Qu.:11.250   3rd Qu.:11.250
                    Max.   :22.00   Max.   :15.000   Max.   :12.000
   Total_pts        Avg_pts      Successful_raids Successful_tackles
 Min.   :577.0   Min.   :32.06   Min.   :247.0    Min.   :146.0
```

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   Total_pts        Avg_pts      Successful_raids Successful_tackles
 Min.   :577.0   Min.   :32.06   Min.   :247.0    Min.   :146.0
 1st Qu.:652.5   1st Qu.:34.19   1st Qu.:287.2    1st Qu.:170.8
 Median :701.5   Median :35.65   Median :314.0    Median :190.5
 Mean   :699.6   Mean   :35.80   Mean   :320.1    Mean   :186.2
 3rd Qu.:740.2   3rd Qu.:37.81   3rd Qu.:352.2    3rd Qu.:200.0
 Max.   :844.0   Max.   :38.78   Max.   :413.0    Max.   :220.0
    Raid_pts       Tackle_pts     Avg_raid_pts   Avg_tackle_pts
 Min.   :319.0   Min.   :160.0   Min.   :17.72   Min.   : 8.890
 1st Qu.:362.2   1st Qu.:190.2   1st Qu.:19.57   1st Qu.: 9.335
 Median :398.0   Median :204.0   Median :20.02   Median :10.710
 Mean   :402.8   Mean   :203.3   Mean   :20.62   Mean   :10.423
 3rd Qu.:429.5   3rd Qu.:221.5   3rd Qu.:21.52   3rd Qu.:11.170
 Max.   :516.0   Max.   :244.0   Max.   :25.67   Max.   :11.740
 Super_tackles    DOD_raid_pts   Total_pts_conceded  Super_raids
 Min.   : 6.00   Min.   :24.00   Min.   :656.0      Min.   : 5.00
 1st Qu.:15.50   1st Qu.:43.00   1st Qu.:665.0      1st Qu.: 8.00
 Median :19.00   Median :49.50   Median :698.0      Median : 8.50
 Mean   :19.08   Mean   :49.83   Mean   :712.4      Mean   : 9.75
 3rd Qu.:24.00   3rd Qu.:57.75   3rd Qu.:737.2      3rd Qu.:11.00
 Max.   :28.00   Max.   :65.00   Max.   :812.0      Max.   :20.00
  Total_raids    All_outs_inflicted All_outs_conceded
 Min.   :738.0   Min.   :17.00      Min.   :20.00
 1st Qu.:761.8   1st Qu.:20.00      1st Qu.:22.50
 Median :801.5   Median :24.50      Median :26.00
 Mean   :805.8   Mean   :25.67      Mean   :25.67
 3rd Qu.:833.5   3rd Qu.:30.25      3rd Qu.:28.00
 Max.   :912.0   Max.   :39.00      Max.   :34.00
> # Get the column names
> names(my_data)
 [1] "Team"               "Matches_played"     "Matches_won"
 [4] "Matches_lost"       "Total_pts"          "Avg_pts"
 [7] "Successful_raids"   "Successful_tackles" "Raid_pts"
[10] "Tackle_pts"         "Avg_raid_pts"       "Avg_tackle_pts"
[13] "Super_tackles"      "DOD_raid_pts"       "Total_pts_conceded"
[16] "Super_raids"        "Total_raids"        "All_outs_inflicted"
[19] "All_outs_conceded"
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 1st Qu.:15.50   1st Qu.:43.00   1st Qu.:665.0      1st Qu.: 8.00
 Median :19.00   Median :49.50   Median :698.0      Median : 8.50
 Mean   :19.08   Mean   :49.83   Mean   :712.4      Mean   : 9.75
 3rd Qu.:24.00   3rd Qu.:57.75   3rd Qu.:737.2      3rd Qu.:11.00
 Max.   :28.00   Max.   :65.00   Max.   :812.0      Max.   :20.00
  Total_raids    All_outs_inflicted All_outs_conceded
 Min.   :738.0   Min.   :17.00      Min.   :20.00
 1st Qu.:761.8   1st Qu.:20.00      1st Qu.:22.50
 Median :801.5   Median :24.50      Median :26.00
 Mean   :805.8   Mean   :25.67      Mean   :25.67
 3rd Qu.:833.5   3rd Qu.:30.25      3rd Qu.:28.00
 Max.   :912.0   Max.   :39.00      Max.   :34.00
> # Get the column names
> names(my_data)
 [1] "Team"               "Matches_played"     "Matches_won"
 [4] "Matches_lost"       "Total_pts"          "Avg_pts"
 [7] "Successful_raids"   "Successful_tackles" "Raid_pts"
[10] "Tackle_pts"         "Avg_raid_pts"       "Avg_tackle_pts"
[13] "Super_tackles"      "DOD_raid_pts"       "Total_pts_conceded"
[16] "Super_raids"        "Total_raids"        "All_outs_inflicted"
[19] "All_outs_conceded"
> cat("Column Names: ", names(my_data), "\n")
Column Names:  Team Matches_played Matches_won Matches_lost Total_pts Avg_pts Suc
cessful_raids Successful_tackles Raid_pts Tackle_pts Avg_raid_pts Avg_tackle_pts
Super_tackles DOD_raid_pts Total_pts_conceded Super_raids Total_raids All_outs_in
flicted All_outs_conceded
> # Use the 'psych' package for more detailed descriptive statistics
> # 'describe()' provides: n, mean, sd, median, trimmed mean, mad, min, max, rang
e, skew, kurtosis, and se.
> describe(my_data)
Error in describe(my_data) : could not find function "describe"
```

Show Traceback
Rerun with Debug

```
>
```

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