

PRACTICAL NO 3

AIM : Exploring data: View() or print() (R).

Output:

The screenshot shows the RStudio interface with the following code in the console:

```

> library(readr)
> library(psych)
> 
> my_data <- read.csv("Shark Tank Brasil dataset.csv")
> 
> # View the first few rows
> cat("\n--- head(my_data) ---\n")
--- head(my_data) ---
> print(head(my_data))

```

The output of the `print(head(my_data))` command is displayed below:

Season.Number	Startup.Name	Episode.Number	Pitch.Number	Season.Start	Season.End	Original.Air.Date	Industry
1	Gourmetzinho	1	1	10-Oct-2016	26-Jan-2017	10-Oct-2016	Food and Beverage
2	RevoFoot	1	2	10-Oct-2016	26-Jan-2017	10-Oct-2016	Health/Wellness
3	Velo	1	3	10-Oct-2016	26-Jan-2017	10-Oct-2016	Children/Education
4	BostaEmLata	1	4	10-Oct-2016	26-Jan-2017	10-Oct-2016	Business Services
5	M'AnaManutenção	2	5	10-Oct-2016	26-Jan-2017	17-Oct-2016	Technology/Software
6	PensysTecnologia	2	6	10-Oct-2016	26-Jan-2017	17-Oct-2016	Business Services

The environment pane on the right shows the loaded objects: `high_r...` (107 obs. of 10 ...), `Housing` (545 obs. of 13 ...), `housin...` (545 obs. of 13 ...), `low_co...` (71 obs. of 13 v...), `low_ip...` (10000 obs. of 1...), `my_data` (519 obs. of 25 ...), `pref_a...` (24 obs. of 13 v...), `Shark...` (519 obs. of 25 ...), and `specia...` (59 obs. of 13 v...).

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```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function Addins

Source
Console Terminal Background Jobs
R - R 4.5.2 C:/Users/PRIVANKA/Downloads/
1
2
3
4
5
6
>
> # View the last few rows
> cat("\n--- tail(my_data) ---\n")

--- tail(my_data) ---
> print(tail(my_data))
  Season.Number Startup.Name Episode.Number Pitch.Number Season.Start Season.End Original.Air.Date Business.Services Industry
514 10 BRASolution 9 515 22-Sep-2025 10-Nov-2025 20-Oct-2025 Business Services
515 10 Hoomy 10 516 22-Sep-2025 10-Nov-2025 23-Oct-2025 Lifestyle/Home
516 10 PretaPorter 10 517 22-Sep-2025 10-Nov-2025 23-Oct-2025 Liquor/Alcohol
517 10 Box24x7 11 518 22-Sep-2025 10-Nov-2025 27-Oct-2025 Lifestyle/Home
518 10 FreshFemme 11 519 22-Sep-2025 10-Nov-2025 27-Oct-2025 Health/Wellness
519 10 JhowBatata 11 520 22-Sep-2025 10-Nov-2025 27-Oct-2025 Food and Beverage

  Business.Description Company.Website Entrepreneur.Names Original.Ask.Amount
514 specific industrial solution or product NA NA NA
515 Bed, Bath, and Tableware items NA NA NA
516 beer brand with a strong identity, producing a "Black IPA" NA NA NA
517 micro-locations focused on promoting conscious consumption NA NA NA
518 intimate wipes and hygiene products specifically designed for women NA NA NA
519 potato-based product NA NA NA

  Original.Offered.Equity Valuation.Requested Got.Deal Total.Deal.Amount Total.Deal.Equity Deal.Valuation Loan Deal.Has.Conditions
514 NA NA NA 0 NA NA NA NA
515 NA NA NA 1 150000 20 750000
516 NA NA NA 1 300000 10 3000000
517 NA NA NA 1 150000 25 600000
518 NA NA NA 0 NA NA NA
519 NA NA NA 0 NA NA NA

  Number.of.Sharks.in.Deal Investment.Amount.Per.Shark Equity.Per.Shark Mentoring Invested.Shark.Names
514 NA NA NA NA
515 NA NA NA NA
516 1 150000 20 Camila Farani
517 1 300000 10 Joao Apollinario
518 1 150000 25 Luiza Trajano
519 NA NA NA NA
```

```
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Go to file/function Addins

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>
> # Get the dimensions (rows and columns)
> cat("\n--- dim(my_data) ---\n")

--- dim(my_data) ---
> cat("Dimensions (Rows, Columns): ", dim(my_data), "\n")
Dimensions (Rows, Columns): 519 25
>
> # Check structure (types of variables)
> cat("\n--- str(my_data) ---\n")

--- str(my_data) ---
> str(my_data)
'data.frame': 519 obs. of 25 variables:
 $ Season.Number : int 1 1 1 1 1 1 1 1 1 ...
 $ Startup.Name : chr "Gourmetzinhos" "RevoFoot" "Velo" "BostaEmLata" ...
 $ Episode.Number : int 1 1 1 1 2 2 2 2 3 ...
 $ Pitch.Number : int 1 2 3 4 5 6 7 8 9 10 ...
 $ Season.Start : chr "10-Oct-2016" "10-Oct-2016" "10-Oct-2016" "10-Oct-2016" ...
 $ Season.End : chr "26-Jan-2017" "26-Jan-2017" "26-Jan-2017" "26-Jan-2017" ...
 $ Original.Air.Date : chr "10-Oct-2016" "10-Oct-2016" "10-Oct-2016" "10-Oct-2016" ...
 $ Industry : chr "Food and Beverage" "Health/Wellness" "Children/Education" "Business Services" ...
 $ Business.Description : chr "Healthy, frozen baby food/meals for children" "Prosthetic feet, aiming for a lighter, more durable, and accessible product using innovative materials" "Bicycle parts, electric bikes and scooters" "Organic fertilizer, product for urban gardeners" ...
 $ Company.Website : Tgpi NA NA NA NA NA NA ...
 $ Entrepreneur.Names : chr "" "" "" "" "" "" "" "" "" ...
 $ Original.Ask.Amount : int 500000 400000 400000 150000 100000 300000 800000 500000 185000 295000 ...
 $ Original.Offered.Equity : num 20 20 20 30 10 5 4 20 15 5 ...
 $ Valuation.Requested : int 2500000 2000000 2000000 500000 1000000 6000000 20000000 2500000 1233333 5900000 ...
 $ Got.Deal : int 0 0 0 0 0 1 0 0 0 ...
 $ Total.Deal.Amount : int NA NA NA NA NA NA 300000 NA NA NA ...
 $ Total.Deal.Equity : num NA NA NA NA NA NA 10 NA NA NA ...
 $ Deal.Valuation : int NA NA NA NA NA NA 3000000 NA NA NA ...
 $ Loan : chr "" "" "" "" "" "" "" "" "" ...
 $ Deal.Has.Conditions : chr "" "" "" "" "" "" "" "" "" ...
 $ Number.of.Sharks.in.Deal : int NA NA NA NA NA NA 2 NA NA NA ...
 $ Investment.Amount.Per.Shark : num NA NA NA NA NA NA 150000 NA NA NA ...
 $ Equity.Per.Shark : num NA NA NA NA NA NA 5 NA NA NA ...
 $ Mentoring : chr "" "" "" "" "" "" "" "" "" ...
 $ Invested.Shark.Names : chr "" "" "" "" "" "" "" "" "" ...
```

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```
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> # Summary of dataset
> cat("\n--- summary(my_data) ---\n")
--- summary(my_data) ---
> print(summary(my_data))
Season.Number Startup.Name Episode.Number Pitch.Number Season.Start Season.End Original.Air.Date
Min. : 1.000 Length:519 Min. : 1.00 Length:519 Length:519
1st Qu.: 3.000 Class :character 1st Qu.: 4.00 1st Qu.:130.5 Class :character Class :character
Median : 5.000 Mode :character Median : 8.00 Median :261.0 Mode :character Mode :character
Mean : 5.004 Mean : 7.79 Mean :260.5
3rd Qu.: 7.000 3rd Qu.:11.00 3rd Qu.:390.5
Max. :10.000 Max. :20.00 Max. :520.0

Industry Business.Description Company.Website Entrepreneur.Names Original.Ask.Amount Original.offered.Equity
Length:519 Length:519 Mode:logical Length:519 Min. : 5 Min. : 4.00
Class :character NA's:519 Class :character Class :character Class :character
Mode :character Mode :character Mode :character Mode :character

Valuation.Requested Got.Deal Total.Deal.Amount Total.Deal.Equity Deal.Valuation Loan Deal.Has.Conditions
Min. : 17 Min. :0.0000 Min. :100000 Min. :1.00 Min. :250000 Length:519 Length:519
1st Qu.: 1500000 1st Qu.:0.0000 1st Qu.:150000 1st Qu.:20.00 1st Qu.:666667 Class :character Class :character
Median : 2000000 Median :0.0000 Median :200000 Median :20.00 Median :1000000 Mode :character Mode :character
Mean : 5689378 Mean :0.4506 Mean :269737 Mean :21.49 Mean :1932251
3rd Qu.: 4000000 3rd Qu.:1.0000 3rd Qu.:300000 3rd Qu.:25.00 3rd Qu.:2000000
Max. :400000000 Max. :1.0000 Max. :2000000 Max. :60.00 Max. :66666667
NA's :282 NA's :13 NA's :291 NA's :291 NA's :291

Number.of.Sharks.in.Deal Investment.Amount.Per.Shark Equity.Per.Shark Mentoring Invested.Shark.Names
Min. :1.000 Min. : 40000 Min. :1.00 Length:519 Length:519
1st Qu.:1.000 1st Qu.:150000 1st Qu.:15.00 Class :character Class :character
Median :1.000 Median :200000 Median :20.00 Mode :character Mode :character
Mean :1.276 Mean :234020 Mean :19.78
3rd Qu.:1.000 3rd Qu.:300000 3rd Qu.:25.00
Max. :5.000 Max. :1500000 Max. :40.00
NA's :291 NA's :291 NA's :291
```

```
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File Edit Code View Plots Session Build Debug Profile Tools Help
Source
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> # Column names
> cat("\n--- names(my_data) ---\n")
--- names(my_data) ---
> cat("Column Names: ", names(my_data), "\n")
Column Names: Season.Number Startup.Name Episode.Number Pitch.Number Season.Start Season.End Original.Air.Date Industry Business.Description Company.Website Entrepreneur.Names Original.Ask.Amount Original.offered.Equity Valuation.Requested Got.Deal Total.Deal.Amount Total.Deal.Equity Deal.Valuation Loan Deal.Has.Conditions Number.of.Sharks.in.Deal Investment.Amount.Per.Shark Equity.Per.Shark Mentoring Invested.Shark.Names
> # Detailed descriptive statistics (using the 'psych' package)
> cat("\n--- describe(my_data) ---\n")
--- describe(my_data) ---
> print(describe(my_data))
vars n mean sd median trimmed mad min max range skew kurtosis
Season.Number 1 519 5.00 2.76 5 4.94 2.97 1 10 9 0.18 -1.13
Startup.Name* 2 519 259.18 149.72 259 259.10 192.74 1 518 517 0.00 -1.21
Episode.Number 3 519 7.79 4.45 8 7.60 5.93 1 20 19 0.31 -0.73
Pitch.Number 4 519 260.52 150.40 261 260.53 192.74 1 520 519 0.00 -1.21
Season.Start* 5 519 5.34 2.95 5 5.32 4.45 1 10 9 0.03 -1.34
Season.End* 6 519 5.92 2.71 6 5.97 2.97 1 10 9 -0.10 -1.08
Original.Air.Date* 7 519 71.31 41.01 72 71.42 51.89 1 141 140 -0.02 -1.22
Industry* 8 519 8.11 4.34 7 7.94 4.45 1 15 14 0.40 -1.16
Business.Description* 9 519 258.01 149.96 258 258.00 192.74 1 517 516 0.00 -1.21
Company.Website 10 0 NA NA NA NA Inf -Inf NA NA
Entrepreneur.Names* 11 519 1.01 0.16 1 1.00 0.00 1 4 3 15.52 253.68
Original.Ask.Amount 12 239 512029.31 1775052.71 250000 273963.73 148260.00 5 200000000 19999995 8.71 80.78
Original.offered.Equity 13 239 11.33 6.58 10 10.13 0.00 4 50 46 2.53 8.10
Valuation.Requested 14 237 5689378.21 26842397.00 2000000 2851465.96 1482600.00 17 400000000 399999983 13.58 194.16
Got.Deal 15 506 0.45 0.50 0 0.44 0.00 0 1 1 0.20 -1.96
Total.Deal.Amount 16 228 269736.84 198631.71 200000 239945.65 74130.00 100000 2000000 1900000 4.51 30.64
Total.Deal.Equity 17 228 21.49 7.99 20 21.36 7.41 1 60 59 0.52 1.47
Deal.Valuation 18 228 1932251.23 4730762.37 1000000 1268936.07 741300.00 250000 66666667 66416667 11.51 151.48
Loan* 19 519 1.00 0.04 1 1.00 0.00 1 2 1 22.65 512.01
Deal.Has.Conditions* 20 519 1.00 0.04 1 1.00 0.00 1 2 1 22.65 512.01
Number.of.Sharks.in.Deal 21 278 1.28 0.87 1 1.04 0.00 1 5 4 2.62 11.73
```

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The screenshot shows the RStudio interface with a data frame loaded. The data frame has 25 columns and 519 rows. The columns are: Deal.Has.Conditions*, Number.of.Sharks.in.Deal, Investment.Amount.Per.Shark, Equity.Per.Shark, Mentoring*, Invested.Shark.Names*, Season.Number, Startup.Name*, Episode.Number, Pitch.Number, Season.Start*, Season.End*, Original.Air.Date*, Industry*, Business.Description*, Company.Website, Entrepreneur.Names*, Original.Ask.Amount, Original.Offered.Equity, Valuation.Requested, Got.Deal, Total.Deal.Amount, Total.Deal.Equity, Deal.Valuation, Loan*, Deal.Has.Conditions*, Number.of.Sharks.in.Deal, Investment.Amount.Per.Shark, Equity.Per.Shark, Mentoring*, and Invested.Shark.Names*.

The console displays the following warning messages:

```
Warning messages:
1: In FUN(newX[, i], ...) : no non-missing arguments to min; returning Inf
2: In FUN(newX[, i], ...) :
no non-missing arguments to max; returning -Inf
```

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