

MVLU COLLEGE
Data analysis with SAS/SSPR/R
PRACTICAL NO.15

Aim:15. Generating basic summaries using str() or summary() (R).

INPUT:

```
flipkart_df <- read.csv("D:/S119/DATA ANAN/flipkart.csv", na.strings = c("", "NA"))

flipkart_df$Rating <- as.numeric(flipkart_df$Rating)
flipkart_df$actprice1 <- as.numeric(flipkart_df$actprice1)

print("--- Data Loaded ---")

print("--- OUTPUT OF str() ---")
str(flipkart_df)

print("--- OUTPUT OF summary() [Before Factor Conversion] ---")
summary(flipkart_df)

flipkart_df$maincateg <- as.factor(flipkart_df$maincateg)

print("--- OUTPUT OF summary() [After Factor Conversion] ---")
summary(flipkart_df)

avg_rating <- mean(flipkart_df$Rating, na.rm = TRUE)
max_price <- max(flipkart_df$actprice1, na.rm = TRUE)

print(paste("Average Rating:", avg_rating))
print(paste("Highest Price:", max_price))
```

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OUTPUT:

RStudio

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Console Terminal Background Jobs

```

> flipkart <- read.csv("D:/S119/DATA ANAN/flipkart.csv", header=FALSE)
> view(flipkart)
> flipkart_df <- read.csv("D:/S119/DATA ANAN/flipkart.csv", na.strings = c("", "NA"))

> flipkart_df$rating <- as.numeric(flipkart_df$rating)
> flipkart_df$actprice <- as.numeric(flipkart_df$actprice)
>
> print("---- Data Loaded ---")
[1] "---- Data Loaded ---"
>
> print("---- OUTPUT OF str() ---")
[1] "---- OUTPUT OF str() ---"
> str(flipkart_df)
'data.frame': 5244 obs. of 14 variables:
 $ id : int 2242 20532 10648 20677 12593 11159 10680 6433 2794 11579 ...
 $ title : chr "Casuals For Men (Blue)" "Women Black Flats Sandal" "Women Gold Wedges Sandal" "Me...
 $ maincategory : num 3.8 3.9 3.9 3.9 3.9 3.9 3.9 3.8 ...
 $ platform : chr "Men" "Women" "Men" ...
 $ price : int 999 999 999 2099 999 ...
 $ norating1: int 27928 3013 449 291 2423 541 824 166 1816 3066 ...
 $ noreviews1: int 3543 404 52 40 326 72 105 24 218 392 ...
 $ star_SF : int 14238 1458 229 141 1265 281 386 94 899 1304 ...
 $ star_AF : int 4295 657 70 51 414 104 199 39 360 803 ...
 $ star_3F : int 3457 397 71 49 293 69 106 12 239 462 ...
 $ star_2F : int 1962 182 33 17 143 17 61 6 113 189 ...
 $ star_1F : int 3976 321 46 32 308 70 72 15 204 308 ...
 $ fulfilled: int 1 1 1 0 0 1 0 1 ...
>
> print("---- OUTPUT OF summary() [Before Factor Conversion] ---")
[1] "---- OUTPUT OF summary() [Before Factor Conversion] ---"
> summary(flipkart_df)
   id          title        Rating      maincategory
Min. : 0 Length:5244    Min. :0.000 Length:5244
1st Qu.: 5287 Class :character 1st Qu.:3.900 Class :character
Median :10562 Mode :character   Median :4.000 Mode :character
Mean   :10507 Mean   :4.011
3rd Qu.:15637 3rd Qu.:4.200

```

Environment History Connections Tutorial

Project: (None)

Files Plots Packages Help Viewer Presentation

User Library

askpass backports base64enc bit blob broom BDSA bslib cachem callr cellanger cli clipr conflicted crayon

MVLU COLLEGE

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RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Source

```

> R.4.5.2 - ~\

$ fulfilled1: int  1 1 1 1 0 0 1 1 0 1 ...
>
> print("---- OUTPUT OF summary() [Before Factor Conversion] ----")
[1] "---- OUTPUT OF summary() [Before Factor Conversion] ----"
> summary(flipkart_df)

      title          Rating       maincateg
Min. : 0 Length:5244   Min. :0.0000 Men :2145
1st Qu.: 5287 Class :character 1st Qu.:3.900 women:3032
Median :10562 Mode :character Median :4.000 NA's : 67
Mean  :10507 Mean  :4.011
3rd Qu.:15637 3rd Qu.:4.200
Max. :20964 Max. :5.000
NA's :203

platform    actprice1  norating1  noreviews1
Length:5244 Min. : 139 Min. : 1 Min. : 0.0
Class :character 1st Qu.: 699 1st Qu.: 66 1st Qu.: 9.0
Mode : character Median : 999 Median : 307 Median : 0
Mean : 1557.4 Mean : 639.8 Mean : 356.4 Mean : 154.1
3rd Qu.: 764.2 3rd Qu.: 310.2 3rd Qu.: 166.0 3rd Qu.: 75.0
Max. :15193.0 Max. :74037.0 Max. :49924.0 Max. :12629.0
NA's :68

star_5f     star_4f     star_3f     star_2f
Min. : 0.0 Min. : 0.0 Min. : 0.0 Min. : 0.0
1st Qu.: 32.0 1st Qu.: 12.0 1st Qu.: 7.0 1st Qu.: 3.0
Median : 156.0 Median : 61.0 Median : 34.0 Median : 16.0
Mean : 1557.4 Mean : 639.8 Mean : 356.4 Mean : 154.1
3rd Qu.: 270.4 3rd Qu.: 100.0 3rd Qu.: 56.0 3rd Qu.: 15.0
Max. :23139.0 Max. :1999.0 Max. :1000.0 Max. :1000.0
NA's :186

star_1f     fulfilled
Min. : 0.0 Min. :0.0000
1st Qu.: 6.0 1st Qu.:0.0000
Median : 29.0 Median :0.0000
Mean : 270.4 Mean :0.6045
3rd Qu.: 131.0 3rd Qu.:1.0000
Max. :23139.0 Max. :1.0000
NA's :186

> flipkart_df$maincateg <- as.factor(flipkart_df$maincateg)
>
> print("---- OUTPUT OF summary() [After Factor Conversion] ----")
[1] "---- OUTPUT OF summary() [After Factor Conversion] ----"
> summary(flipkart_df)

      title          Rating       maincateg
Min. : 0 Length:5244   Min. :0.0000 Men :2145
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NA's :186

avg_rating <- mean(flipkart_df$rating, na.rm = TRUE)
max_price <- max(flipkart_df$actprice1, na.rm = TRUE)
pri <- paste("Average Rating:", avg_rating)
[1] "Average Rating: 0.1108906962904"
> print(paste("Highest Price:", max_price))
[1] "Highest Price: 999"
>
```

Environment History Connections Tutorial

Global Environment 4919 objects, 871 variables

- starts_with_h 918 obs. of 1 variable
- unique_customers 200 obs. of 20 variables
- wide_df 100000 obs. of 4 variables

values

avg_chol	198.799564270153
avg_rating	4.01108906962904
current_time	2025-12-08 11:11:18 IST
group1	num [1:10] 26 25 10 34 30 23 28 29 25 27
group2	num [1:10] 22 24 19 31 27 21 26 28 24 26
max_price	15999

Files Plots Packages Help Viewer Presentation

Install Update

User Library

Package	Description	Source	Version
askpass	Password Entry Utilities for R, Git, ...	CRAN	.1
backports	Reimplementations of Functions ...	CRAN	5.0
base64enc	Tools for base64 encoding	CRAN	0.1-3
bit	Classes and Methods for Fast Mem...	CRAN	4.6.0
bit64	A S3 Class for Vectors <-> Int...	CRAN	4.6.0-1
blob	A Simple S3 Class for ...	CRAN	1.2.4
broom	Convert Statistical Objects into T...	CRAN	1.0.10
BSDA	Basic Statistics and Data Analysis	CRAN	1.2.2
bslib	Custom 'Bootstrap'-Style Themes ...	CRAN	0.9.0
cachem	Cache R Objects with Automatic P...	CRAN	1.1.0
callr	Call R from R	CRAN	3.7.6
cellranger	Translate Spreadsheet Cell Ranges...	CRAN	1.1.0
cli	Helpers for Developing Command-Li...	CRAN	3.6.5
clipr	Read and Write from the System ...	CRAN	0.8.0
conflicted	An Alternative Conflict Resolution	CRAN	1.2.0
cpp11	A C++11 Interface for R's C Interf...	CRAN	0.5.2
crayon	Colored Terminal Output	CRAN	1.5.3
curl	A Modern and Flexible Web Client	CRAN	7.0.0

RStudio

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