

SHETH L.U.J AND SIR M.V. COLLEGE

SUBJECT :- DATA ANALYSIS WITH SAS/SPSS/R

MODULE 2 - PRACTICAL – 2

AIM:- Generating frequency tables using table() or count() (R)

OUTPUT:-

```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Source
Console Terminal Background Jobs
> library(dplyr)
> df <- read.csv("C:\\Users\\IT\\Downloads\\youtube_tech_channels_20251120_133753.csv")
> print("Dataset Loaded Successfully")
[1] "Dataset Loaded Successfully"
>
> # 2. Dataset Overview
> head(df)
  channel_id channel_name
1 UCXuqS1HAE6W-ye3A0Tunw Linus Tech Tips
2 UCwV7mbMwH4-V0ZxdmpPBA Programming with Mosh
3 UchZ2GfcnjH10DG4nweEduw TechSource
4 UC4Svo0ue36XcFoyb5Lh1vIQ Bro Code
5 UCvew9qk8j0z0snqubG7CFw John Hammond
6 UCeeFFmCjalkjtfZAGskOCA TechLinked

description
1 Linus Tech Tips is a passionate team of "professionally curious" experts in consumer technology and video production who aim to educate and entertain.
2 Hi! I'm Mosh 8y', a software engineer with over 20 years of experience. I'm all about clear, concise, practical coding tutorials & no fluff, just the good stuff!
3 I upload new videos!
4 Join the Discord Server:
5 coding bootcamps HATE HIM!
6 Free cybersecurity Education and Ethical Hacking.
7 TechLinked keeps you up to date with a fast, funny roundup of the latest tech news every Monday, Wednesday, and Friday.
8 subscribers total_views total_videos created_date country uploads_playlist scraped_at
1 16600000 9092244390 6989 2008-11-25T00:46:52Z CA UUXuqS1HAE6W-ye3A0Tunw 2025-11-20T13:37:53.306286
2 4860000 257598451 243 2014-10-07T00:40:53Z US UUVw7mbMwH4-V0ZxdmpPBA 2025-11-20T13:37:53.306286
3 4010000 870967915 1897 2010-01-24T22:34:11Z US UUhZ2GfcnjH10DG4nweEduw 2025-11-20T13:37:53.306286
4 2990000 178609297 1000 2019-10-10T14:40:46.568078Z US Uu4Svo0ue36XcFoyb5Lh1vIQ 2025-11-20T13:37:53.306286
5 2080000 82120292 1740 2011-02-06T03:59:46Z US UUVew9qk8j0z0snqubG7CFw 2025-11-20T13:37:53.306286
6 1990000 628661984 1214 2018-05-03T19:49:25Z CA UueeFFmCjalkjtfZAGskOCA 2025-11-20T13:37:53.306286
> str(df)
'data.frame': 130 obs. of 10 variables:
 $ channel_id : chr "UCXuqS1HAE6W-ye3A0Tunw" "UCwV7mbMwH4-V0ZxdmpPBA" "UchZ2GfcnjH10DG4nweEduw" "UC4Svo0ue36XcFoyb5Lh1vIQ" ...
 $ channel_name : chr "Linus Tech Tips" "Programming with Mosh" "TechSource" "Bro Code" ...
 $ description : chr "Linus Tech Tips is a passionate team of 'professionally curious' experts in consumer technology and video production" "Hi! I'm Mosh 8y', a software engineer with over 20 years of experience. I'm all about clear, concise, practical coding tutorials & no fluff, just the good stuff! I upload new videos! Join the Discord Server: https://discord.gg/TechSource/nITG: https://www.instagram.com/ed.techsource/nTech Deals + Mousepad Merch: https://techsourceshop.com/netsy shop: https://www.dealsource.tech/store/noreame Air Purifier: https://bit.ly/41THXu1" ...
 $ subscribers : int 16600000 4860000 4010000 2990000 2080000 1990000 1750000 1530000 1490000 1400000 ...
 $ total_views : num 9.09e+09 2.58e+08 8.71e+08 1.79e+08 8.21e+07 ...
 $ total_videos : int 6989 243 1897 1000 1740 1214 1287 1789 254 2562 ...
 $ created_date : chr "2008-11-25T00:46:52Z" "2014-10-07T00:40:53Z" "2010-01-24T22:34:11Z" "2019-10-10T14:40:46.568078Z" ...
 $ country : chr "CA" "US" "US" "US" ...
 $ uploads_playlist : chr "UUXuqS1HAE6W-ye3A0Tunw" "UUVw7mbMwH4-V0ZxdmpPBA" "UUhZ2GfcnjH10DG4nweEduw" "Uu4Svo0ue36XcFoyb5Lh1vIQ" ...
 $ scraped_at : chr "2025-11-20T13:37:53.306286" "2025-11-20T13:37:53.306286" "2025-11-20T13:37:53.306286" "2025-11-20T13:37:53.306286" ...
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 $ subscribers : int 16600000 4860000 4010000 2990000 2080000 1990000 1750000 1530000 1490000 1400000 ...
 $ total_views : num 9.09e+09 2.58e+08 8.71e+08 1.79e+08 8.21e+07 ...
 $ total_videos : int 6989 243 1897 1000 1740 1214 1287 1789 254 2562 ...
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> # 3. create a Categorical Variable
> df$subscriber_group <- ifelse(
+   df$subscribers >= 1000000,
+   "1M+ Subscribers",
+   "Below 1M Subscribers"
+ )
> print("Subscriber Group Distribution:")
[1] "Subscriber Group Distribution:"
> table(df$subscriber_group)

1M+ Subscribers Below 1M Subscribers
      14             116

> # 4. Frequency Table using table()
> print("Frequency Table: Country")
[1] "Frequency Table: Country"
> country_freq <- table(df$country)
> print(country_freq)

AE AT AU BG BR CA DE DK ES FI GB HR ID IE IN JP KE MT N/A NO PH PK RU SG US
2 1 2 1 2 1 2 2 1 1 1 13 1 1 1 18 1 1 1 14 1 1 1 1 1 1 1 54

> # 5. Frequency Table using dplyr::count()
> print("Frequency Table: Subscriber Group")
[1] "Frequency Table: Subscriber Group"
> subscriber_freq <- df %>% count(subscriber_group)
> print(subscriber_freq)
```

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SUBJECT :- DATA ANALYSIS WITH SAS/SPSS/R

```
rajji - RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Source
Console Terminal Background Jobs
R - R 4.1.2 - ~/rajji/
>
> # 5. Frequency Table using dplyr::count()
> print("Frequency Table: Subscriber Group")
[1] "Frequency Table: Subscriber Group"
> subscriber_freq <- df %>% count(subscriber_group)
> print(subscriber_freq)
  subscriber_group    n
1 1M+ Subscribers  14
2 Below 1M Subscribers 116
>
> # 6. Cross Tabulation (Two-way Table)
> print("Cross Tabulation: Country vs Subscriber Group")
[1] "Cross Tabulation: Country vs Subscriber Group"
> cross_tab <- table(df$country, df$subscriber_group)
> print(cross_tab)

1M+ Subscribers Below 1M Subscribers
AE      0      2
AT      0      1
AU      0      2
BG      0      1
BR      0      2
CA      2      5
DE      0      2
DK      1      0
ES      0      1
FI      0      1
GB      0     13
HR      1      0
ID      0      1
IE      0      1
IN      0     18
JP      0      1
KE      0      1
MT      0      1
N/A     1     13
NO      0      1
PH      0      1
PK      0      1
RU      0      1
SG      1      0
US      8      46
```

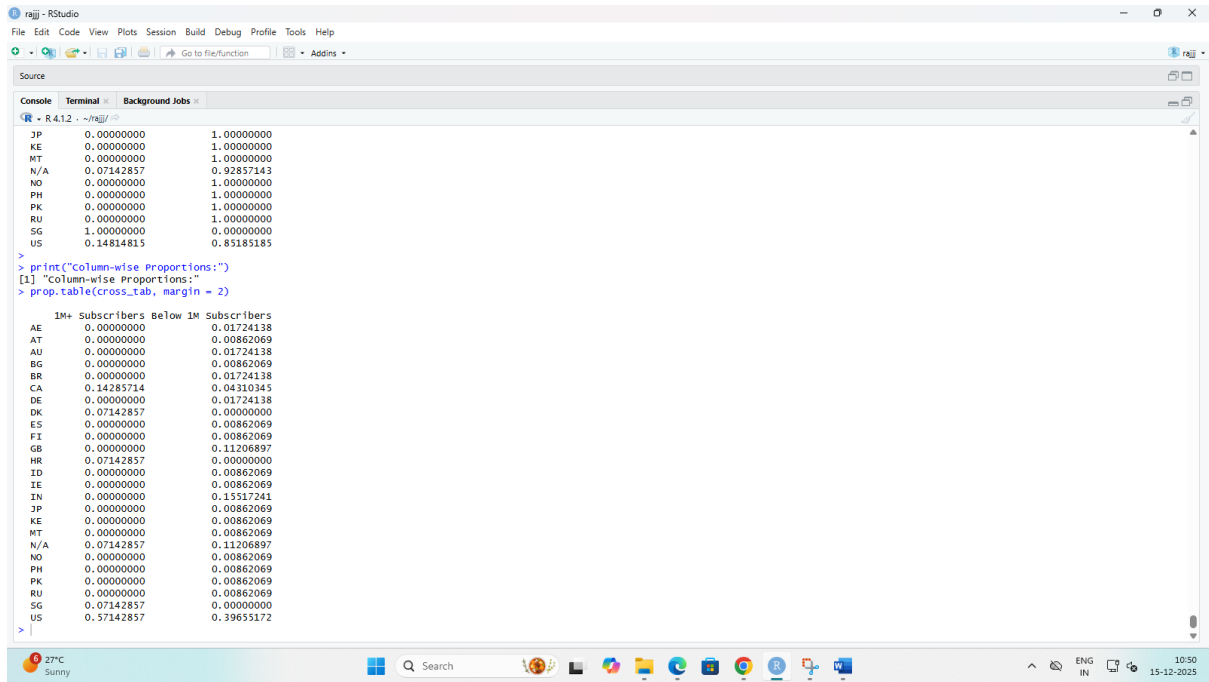
```
rajji - RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Source
Console Terminal Background Jobs
R - R 4.1.2 - ~/rajji/
>
> print("Row-wise Proportions:")
[1] "Row-wise Proportions:"
> prop.table(cross_tab, margin = 1)

1M+ Subscribers Below 1M Subscribers
AE      0.00000000 1.00000000
AT      0.00000000 1.00000000
AU      0.00000000 1.00000000
BG      0.00000000 1.00000000
BR      0.00000000 1.00000000
CA      0.28571429 0.71428571
DE      0.00000000 1.00000000
DK      1.00000000 0.00000000
ES      0.00000000 1.00000000
FI      0.00000000 1.00000000
GB      0.00000000 1.00000000
HR      1.00000000 0.00000000
ID      0.00000000 1.00000000
IE      0.00000000 1.00000000
IN      0.00000000 1.00000000
JP      0.00000000 1.00000000
KE      0.00000000 1.00000000
MT      0.00000000 1.00000000
N/A     0.07142857 0.92857143
NO      0.00000000 1.00000000
PH      0.00000000 1.00000000
PK      0.00000000 1.00000000
RU      0.00000000 1.00000000
SG      1.00000000 0.00000000
US      0.14814815 0.85185185
>
> print("Column-wise Proportions:")
[1] "Column-wise Proportions:"
> prop.table(cross_tab, margin = 2)

1M+ Subscribers Below 1M Subscribers
AE      0.00000000 0.01724138
AT      0.00000000 0.00862069
AU      0.00000000 0.01724138
BG      0.00000000 0.00862069
BR      0.00000000 0.01724138
CA      0.14285714 0.04310345
DE      0.00000000 0.01724138
```

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```
1> print("Column-wise Proportions:")
[1] "Column-wise Proportions:"
2> prop.table(cross_tab, margin = 2)

1M+ Subscribers Below 1M Subscribers
AE 0.00000000 0.01724138
AT 0.00000000 0.00862069
AU 0.00000000 0.01724138
BG 0.00000000 0.00862069
BR 0.00000000 0.01724138
CA 0.14285714 0.04310345
DE 0.00000000 0.01724138
DK 0.07142857 0.00000000
ES 0.00000000 0.00862069
FI 0.00000000 0.00862069
GB 0.00000000 0.11206897
HR 0.07142857 0.00000000
ID 0.00000000 0.00862069
IE 0.00000000 0.00862069
IN 0.00000000 0.15517241
JP 0.00000000 0.00862069
KE 0.00000000 0.00862069
MT 0.00000000 0.00862069
N/A 0.07142857 0.11206897
NO 0.00000000 0.00862069
PH 0.00000000 0.00862069
PK 0.00000000 0.00862069
RU 0.00000000 0.00862069
SG 0.07142857 0.00000000
US 0.57142857 0.39655172
```

The screenshot shows the RStudio interface with the console pane active. The code executed includes a print statement and a call to `prop.table(cross_tab, margin = 2)`. The output displays a matrix of column-wise proportions for two categories: '1M+ Subscribers' and 'Below 1M Subscribers'. The rows represent different countries or regions, with values ranging from 0.00000000 to 0.57142857. The bottom status bar indicates the system is sunny, with a temperature of 27°C, and the date is 15-12-2025.