

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

## Aim:- Creating Cross Tabulation And Two - Way Tables Using Tables () in R

The screenshot shows the RStudio interface with the following details:

- Console:** Displays R code for reading a CSV file and creating various data frames and tables.
- Environment:** Shows the global environment with objects like `total_sleep_df`, `us_jobs`, and several `jobtype_salary_tab` objects.
- Files:** Shows a list of files in the current directory, including CSVs, PDFs, and PPTX files.
- Plots:** Shows a small thumbnail of a WhatsApp image.
- Packages:** Shows available packages.
- Help:** Shows help documentation.
- Viewer:** Shows the output of the R code, including the structure of data frames and the resulting cross-tabulation tables.
- Presentation:** Shows presentation-related options.

Code Snippet:

```
> library(dplyr)
> df <- read_csv("job_market.csv", header = TRUE, stringsAsFactors = TRUE)
> #integrate column names in dataset:-
> print(colnames(df))
[1] "job_title"          "company"           "location"          "job_type"
[5] "category"           "salary_min"        "salary_max"        "experience_required"
[9] "publicity_date"      "skills"
> df %>% 
+   filter(
+     !is.na(job_title),
+     !is.na(salary_min),
+     !is.na(salary_max)
+   )
> df$job_title <- as.factor(df$job_title)
> df$company <- as.factor(df$company)
> df$location <- as.factor(df$location)
> df$job_type <- as.factor(df$job_type)
> df$category <- as.factor(df$category)
> df$salary_min <- as.numeric(df$salary_min)
> df$salary_max <- as.numeric(df$salary_max)
> df$experience_required <- as.numeric(df$experience_required)
> df$Salary_Group <- ifelse(
+   df$salary_max < 30000, "Low Salary",
+   ifelse(df$salary_max < 70000, "Medium Salary", "High Salary")
+ )
> df$Salary_Group <- as.factor(df$Salary_Group)
> print("Salary Group Distribution:")
> print(table(df$Salary_Group))
  High Salary Medium Salary
247            3
> print("Cross-Tabulation: Job Type vs Salary Group")
[1] "Cross-Tabulation: Job Type vs Salary Group"
> jobtype_salary_tab <- table(df$job_type, df$Salary_Group)
> print("Rows = Job Type | Columns = Salary Group")
[1] "Rows = Job Type | Columns = Salary Group"
> print(jobtype_salary_tab)
```

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```
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[1] "Cross-Tabulation: Job Type vs Salary Group"
> jobtype_salary_tab <- table(df$job_type, df$Salary_Group)
> print("Rows = Job Type | Columns = Salary Group")
[1] "Rows = Job Type | Columns = Salary Group"
> print(jobtype_salary_tab)

  High Salary Medium Salary
berufeinstieg    27      2
berufserfahren   1       0
Contract         6       0
Full-time        49      1
Full time        50      0
Part-time        3       0
Internship       1       0
Manager          1       0
Part-time        49      0
professional / experienced 2       0
Remote           55      0
working student  3       0
> print("Cross-Tabulation: Category vs Salary Group")
[1] "Cross-Tabulation: Category vs Salary Group"
> category_salary_tab <- table(df$category, df$Salary_Group)
> print("Rows = Category | Columns = Salary Group")
[1] "Rows = Category | Columns = Salary Group"
> print(category_salary_tab)

  High Salary Medium Salary
Finance          20      0
Helpdesk          1       0
HR                1       0
Marketing and Communication 5       1
Media Planning    1       0
Process Engineering 1       0
Recruitment and Selection 1       0
Remote           9       2
SAP/ERP Consulting 1       0
Social Media Manager 2       0
Software Development 4       0
Technician       7       1
```

NAME:- CHETAN MANDAVKAR  
ROLL NO. S093  
SUBJECT:- Data Analysis With SAS / SPSS / R

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

```
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 - ~/ ...
[1] "Rows = Job Type | Columns = Salary Group"
> print(jobtype_salary_tab)
      High Salary Medium Salary
berufseinstieg           27          2
berufserfahren            1          0
Contract                 6          0
Full-time                49          1
Full-time                50          0
Internship               3          0
Internship               1          0
manager                  1          0
Part-time                49          0
professional / experienced 2          0
Remote                  55          0
working student           3          0
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      High Salary Medium Salary
Finance                  20          0
Helpdesk                 1          0
HR                       1          0
Marketing and Communication 5          1
Media Planning             1          0
Process Engineering       1          0
Recruitment and Selection 1          0
Remote                   9          2
SAP ERP Consulting        1          0
Social Media Manager      2          0
Software Development      4          0
Technology                200         0

[Environment] [History] [Connections] [Tutorial]
R - Global Environment
special_buildings 3007 obs. of 6 variables
total_sleep_df 45 obs. of 2 variables
us_jobs 10 obs. of 12 variables
Values
body_weight_counts 'table' int [1:60(1d)] 1 1 2 1 1 1 1 1 1 1 1 ...
brain_weight_counts 'table' int [1:59(1d)] 1 1 1 1 1 2 1 1 1 1 ...
category_salary_tab 'table' int [1:13, 1:2] 20 1 1 5 1 1 1 9 1 ...
gender_age_tab 'table' int[0 , ]
gender_weight_tab 'table' int[0 , 0 ]
jobtype_salary_tab 'table' int [1:12, 1:2] 27 1 6 49 50 3 1 1 49 2 ...

Files Plots Packages Help Viewer Presentation
New Folder New File Delete Rename More
Home
Name Size Modified
sealeve-weather.csv 48.3 KB Dec 6, 2023, 11:02 AM
Shruti Mandavkar - Exercise 1.docx.pdf 278.1 KB Dec 9, 2025, 7:40 PM
SHRUTI MANDAVKAR EVS REPORT.pdf 357.3 KB Nov 21, 2025, 7:34 PM
Structures and functions of pancreas Shruti Mandavkar.pptx 639.7 KB Aug 24, 2025, 11:35 AM
Student Stress Factors (2).csv 6.9 KB Dec 1, 2025, 12:34 PM
synthetic_fraud_dataset.csv 847.7 KB Dec 1, 2025, 11:09 AM
Synthetic_Transportation_Dataset_Expanded_v2.csv 596.6 KB Dec 1, 2025, 12:10 PM
transactions.csv 25.1 MB Dec 8, 2025, 10:53 AM
Virtual Machines
WhatsApp Image 2025-11-25 at 19.51.57_2b9447da.jpg 17.9 KB Nov 25, 2025, 7:52 PM
qj.csv 263.7 KB Dec 15, 2025, 11:13 AM
ENB2012.data.csv 39.8 KB Dec 15, 2025, 11:13 AM
Practical_No_1_M2.R 262.8 KB Dec 15, 2025, 11:24 AM
Practical_No_2_M2.R 812 B Dec 15, 2025, 11:51 AM
dataset2191_sleep (1).csv 1.7 KB Dec 15, 2025, 11:42 AM
Practical_No_3_M2.R 1.2 KB Dec 15, 2025, 12:27 PM
job_market.csv 32.2 KB Dec 15, 2025, 12:22 PM

29°C Sunny
Search 12:33 15-12-2025
```

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