

MVLU COLLEGE

Aim: 3 Exploring data: View() or print() (R).

Input:

```

RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
> > O Source On Save Go to file/function Addins
prac3.R student_spending
Source | Run | Source | Environment History Connections Tutorial
Packages psych and readr required but are not installed. Install Don't Show Again
1 install.packages(c("readr", "psych"))
2
3 library(readr)
4 library(psych)
5
6 my_data <- read.csv("C:/Users/mvluc/OneDrive/Desktop/ANSHRAH/DATA ANALYSIS WITH SASS SPSS R/datasets/student_spending.csv")
7
8 head(my_data)
9 tail(my_data)
10
11 cat("ANSHRAH SHAIKH S111 SYCS PRAC 3")
12 cat("Dimensions (Rows, Columns): ", dim(my_data), "\n")
13 nrow(my_data)
14 summary(my_data)
15 cat("Column Names: ", names(my_data), "\n")
16 describe(my_data)
17
18 |

```

18:1 [Top Level] R Script

Console Terminal Background Jobs

R + R 4.1.2 . ~/

12:27 31°C Sunny ENG IN 24-11-2025

Environment History Connections Tutorial

R Global Environment

Data

- CHARACTERS_DA_ 33 obs. of 11 variables
- my_data 1000 obs. of 18 variables
- student_spending 1000 obs. of 18 variables
- text_data 20 obs. of 10 variables

Values

- difference 10
- group1 num [1:10] 25 25 10 34 30 23 28 29 25 27
- group2 num [1:10] 22 24 19 31 27 21 26 28 24 26
- instal.packag "bada"

Files Plots Packages Help Viewer Presentation

Folder File Delete Rename

Home

Name	Size	Modified
RData	237 B	Nov 24, 2025, 10:17 AM
Rhistory	8 B	Nov 24, 2025, 11:17 AM
class.printString.java	125 B	Nov 11, 2025, 10:03 AM
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Custom Office Templates		
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GIS DataBase		
GIS Prac.docx	225.7 KB	Nov 18, 2025, 8:41 AM
IISExpress		
My Web Sites		
NetBeansProjects		
Office Tools Practical_1.accdb	604 KB	Oct 11, 2025, 1:32 PM
R		
Virtual Machines		
Visual Studio 2022		

output:

```

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Console Terminal Background Jobs
R + R 4.1.2 . ~/
```

```

cat("ANSHRAH SHAIKH S111 SYCS PRAC 3")
ANSHRAH SHAIKH S111 SYCS PRAC 3
> cat("Dimensions (Rows, Columns): ", dim(my_data), "\n")
Dimensions (Rows, Columns): 1000 18
> str(my_data)
'data.frame': 1000 obs. of 18 variables:
 $ X: int 0 1 2 3 4 5 6 7 8 9 ...
 $ age: int 19 24 24 23 20 25 23 22 18 ...
 $ gender: chr "Non-binary" "Female" "Non-binary" "Female" ...
 $ year_in_school: chr "Freshman" "Junior" "Junior" "Senior" ...
 $ major: chr "Psychology" "Economics" "Economics" "Computer science" ...
 $ monthly_income: int 958 1000 734 617 810 523 1354 631 1402 1423 ...
 $ financial_aid: int 270 875 928 265 522 790 671 748 248 74 ...
 $ tuition: int 952 1000 734 617 810 523 1354 631 1402 1423 ...
 $ housing: int 709 557 666 552 825 481 812 578 626 626 ...
 $ food: int 296 365 220 289 372 386 398 269 354 249 ...
 $ transportation: int 123 85 137 114 168 122 101 92 82 117 ...
 $ books_supplied: int 188 252 99 223 194 131 213 251 155 123 ...
 $ entertainment: int 41 74 130 99 48 73 21 37 123 51 ...
 $ personal_care: int 78 92 23 30 71 38 38 90 41 74 ...
 $ technology: int 134 226 239 163 88 234 157 152 162 243 ...
 $ health_wellness: int 127 129 112 105 71 108 117 56 172 34 ...
 $ miscellaneous: int 72 68 133 55 104 99 48 62 194 196 ...
 $ preferred_payment_method: chr "Credit/Debit Card" "Credit/Debit Card" "Cash" "Mobile Payment App" ...

```

```

> summary(my_data)
      age      gender   year_in_school     major      monthly_income    financial_aid
Min. : 0.0 Min. :0.0000 Length:1000 Length:1000 Length:1000 Min. : 0.0000000000000000
1st Qu.:249.8 1st Qu.:20.00 Class:character Class:character Class:character 1st Qu.: 770.8 1st Qu.: 261.0
Median :499.5 Median :22.00 Mode :character Mode :character Mode :character Median :1021.0 Median : 513.0
Mean   :499.5 Mean   :21.68 Mean   :21.68 Mean   :21.68 Mean   :1020.6 Mean   : 504.8
3rd Qu.:749.2 3rd Qu.:24.00 Mode :character Mode :character Mode :character 3rd Qu.:1288.2 3rd Qu.: 751.5
Max.   :999.0 Max.   :25.00 Max.   :25.00 Max.   :25.00 Max.   :1000.0 Max.   : 504.0
      tuition    housing    food      transportation books_supplies entertainment    personal_care
Min. :3003 Min. :401.0 Min. :100.0 Min. :50.0 Min. :20.0 Min. : 20.0
1st Qu.:3780 1st Qu.:538.8 1st Qu.:175.0 1st Qu.:88.0 1st Qu.:112.0 1st Qu.: 54.00 1st Qu.: 41.0
Median :4548 Median :704.5 Median :255.0 Median :123.0 Median :175.0 Median : 86.00 Median : 62.0
Mean   :4520 Mean   :696.0 Mean   :252.6 Mean   :124.6 Mean   :174.8 Mean   : 84.81 Mean   : 60.7
3rd Qu.:5285 3rd Qu.:837.2 3rd Qu.:330.0 3rd Qu.:162.2 3rd Qu.:238.0 3rd Qu.:116.00 3rd Qu.: 80.0
Max.   :6000 Max.   :1000.0 Max.   :400.0 Max.   :200.0 Max.   :300.0 Max.   :150.00 Max.   :100.0
      technology health_wellness miscellaneous preferred_payment_method
Min. : 50.0 Min. : 30.0 Min. : 20.0 Length:1000
1st Qu.:114.0 1st Qu.: 73.0 1st Qu.: 63.75 Class:character
Median :178.0 Median :115.0 Median :110.00 Mode :character

```

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ANSHRAH SHAIKH

S111

SYCS

DATA ANALYSIS IN SASS / SPSS / R

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The screenshot shows the RStudio interface with the following details:

- Console:** Displays R code and its output. The code includes:
 - Reading datasets: `CHARACTERS_DA`, `my_data`, `student_spend_`, and `text_data`.
 - Summary statistics for `my_data`:

Variable	Min.	Q1	Median	Mean	Q3	Max.
age	0.0	18.0	21.68	21.68	24.00	25.00
gender	0.0	1.0	1.0	1.0	1.0	1.0
year_in_school	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0
major	1.0	1.0	1.0	1.0	1.0	1.0
monthly_income	501.0	501.0	501.0	501.0	501.0	501.0
financial_aid	0.0	0.0	0.0	0.0	0.0	0.0

 - Describing `my_data` leads to an error: `Error in describe(my_data) : could not find function "describe"`. This is highlighted in red.
- Data View:** Shows the structure of the `my_data` dataset with 1000 observations and 18 variables.
- Environment View:** Lists objects in the global environment, including `CHARACTERS_DA`, `my_data`, `student_spend_`, `text_data`, and various R packages.
- File Explorer:** Shows the file structure of the current project, including RData files, Java files, Microsoft Word documents, and other files.
- Bottom Status Bar:** Displays system information like battery level (31%), network status (ENG IN), and date/time (24-11-2025).