RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function | Addins | Project: (None)

DAY2_EXP1.R | DAY2_EXP2.R | DAY2_EXP3.R | DAY2_EXP5.R | DAY2_EXP4.R

Source on Save | Run | Source

```r
# Create a matrix for the data
data <- matrix(c(18, 2, 20, 22, 28, 10, 20, 40, 40), nrow = 3, byrow = TRUE)
rownames(data) <- c("5-6 years", "7-8 years", "9-10 years")
colnames(data) <- c("A", "B", "C")

# Calculate covariance between B and C
cov_bc <- cov(data[, "B"], data[, "C"])
print(paste("Covariance between B and C:", cov_bc))

# Calculate sample covariance matrix for the preferences
cov_matrix <- cov(data)
print("Sample Covariance Matrix:")
print(cov_matrix)

# Calculate correlation between B and C
cor_bc <- cor(data[, "B"], data[, "C"])
print(paste("Correlation between B and C:", cor_bc))

# Calculate sample correlation matrix for the preferences
cor_matrix <- cor(data)
print("Sample Correlation Matrix:")
```

22:18 (Top Level) R Script

R 4.3.3 · ~/

```
> print(cov_matrix)
     A        B        C
A    4  26.0000 -10.0000
B   26 377.3333 143.3333
C  -10 143.3333 233.3333
>
> # Calculate correlation between B and C
> cor_bc <- cor(data[, "B"], data[, "C"])
> print(paste("Correlation between B and C:", cor_bc))
[1] "Correlation between B and C: 0.483054600011872"
>
> # Calculate sample correlation matrix for the preferences
> cor_matrix <- cor(data)
> print("Sample Correlation Matrix:")
[1] "Sample Correlation Matrix:"
> print(cor_matrix)
           A         B          C
A  1.0000000 0.6692383 -0.3273268
B  0.6692383 1.0000000  0.4830546
C -0.3273268 0.4830546  1.0000000
```

Environment | History | Connections | Tutorial

Import Dataset | 147 MiB | List

R | Global Environment

Data	
cor_matrix	num [1:3, 1:3] 1 0.669 -0.327 0.669 1 ...
cov_matrix	num [1:3, 1:3] 4 26 -10 26 377 ...
data	num [1:3, 1:3] 18 22 20 2 28 40 20 10 40
Values	
AirPassengers	Time-Series [1:144] from 1949 to 1961: 112 118 132 129 12…
cor_bc	0.483054600011872
cov_bc	143.333333333333
min_max_normalized	num [1:5] 0 0.125 0.25 0.5 1
z_score_normalized	num [1:5] -0.949 -0.632 -0.316 0.316 1.581

Files | Plots | Packages | Help | Viewer | Presentation

Zoom | Export

92°F Sunny | Search | ENG IN | 14:30 04-03-2024