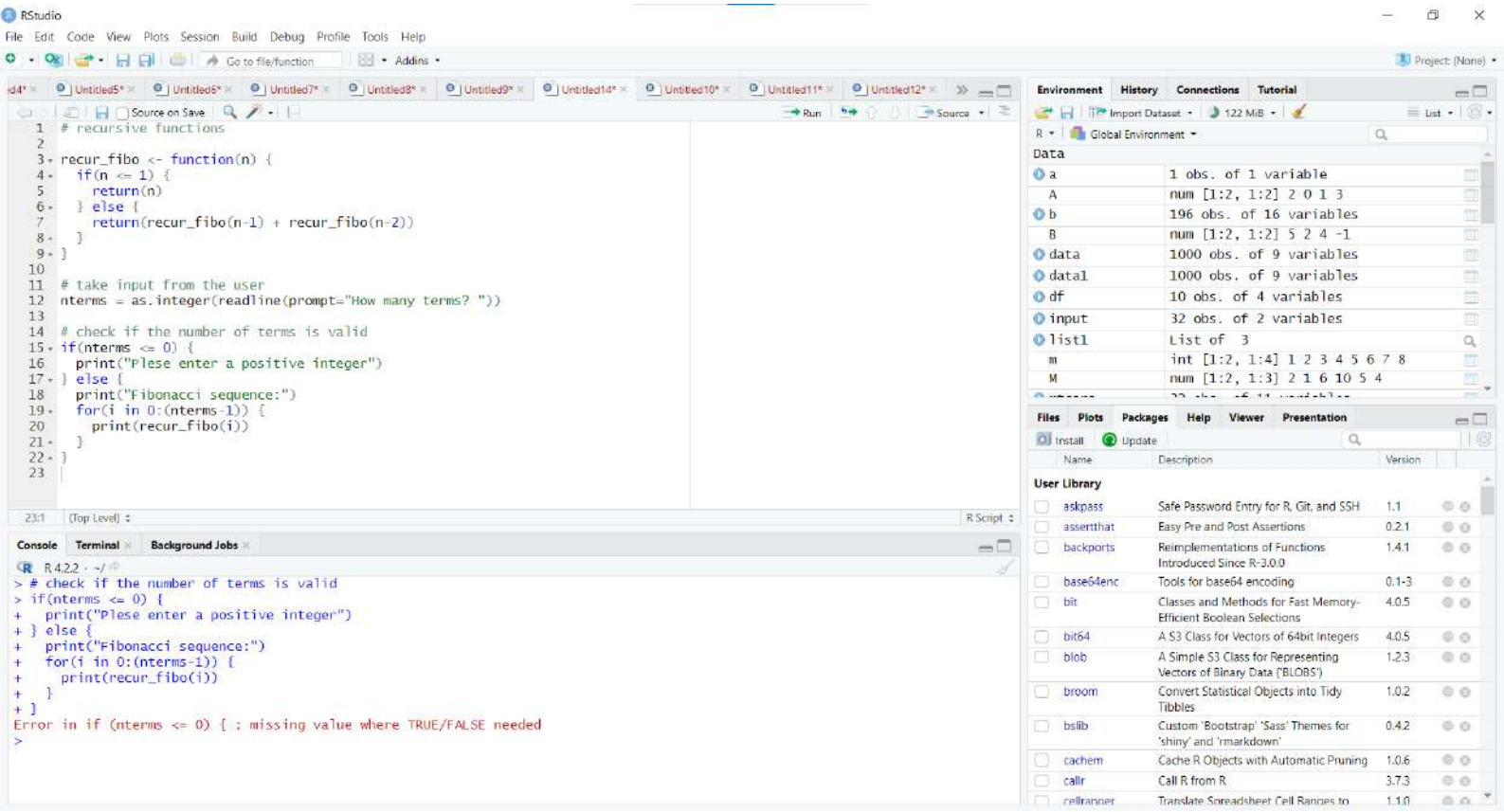
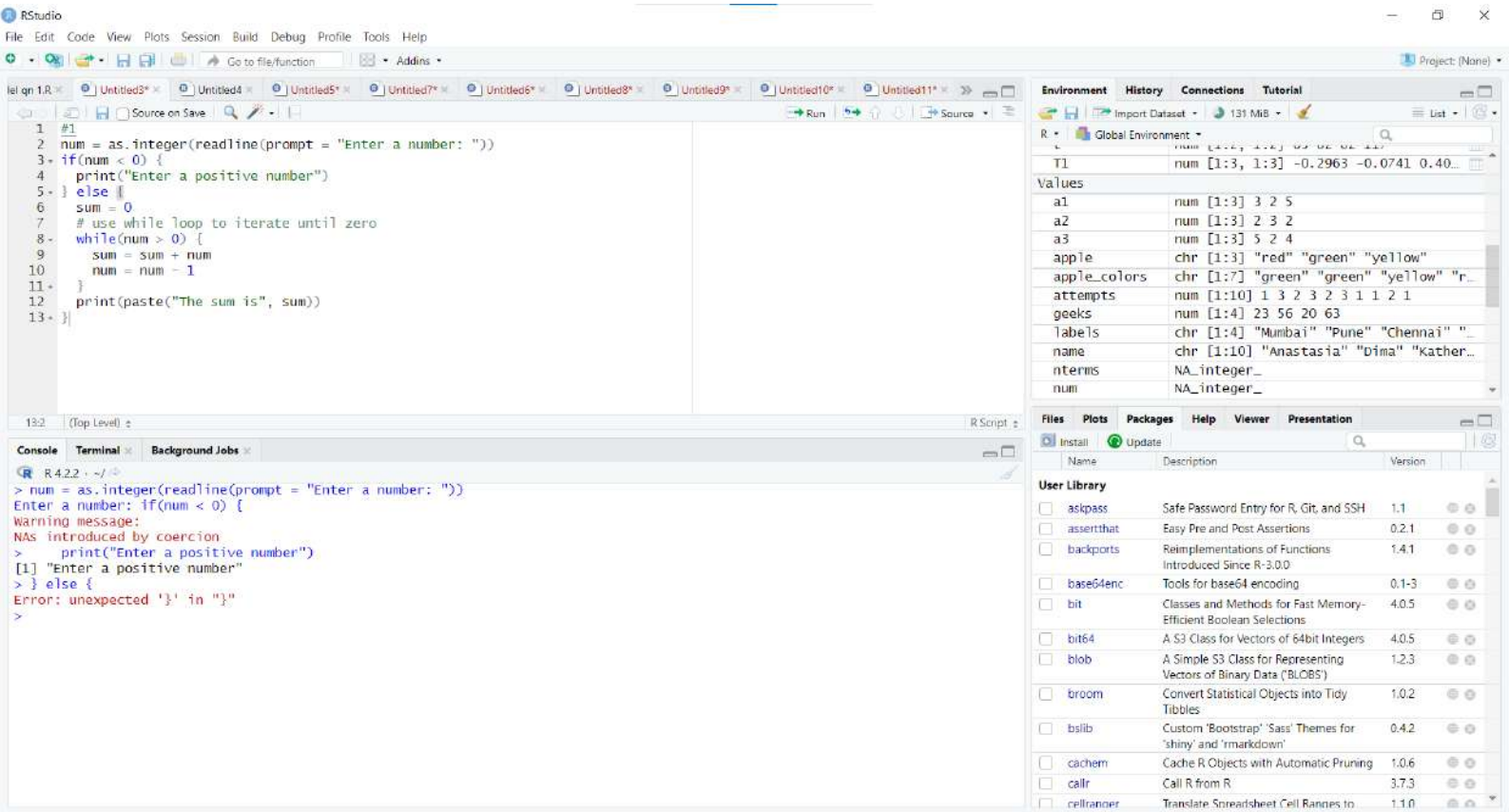
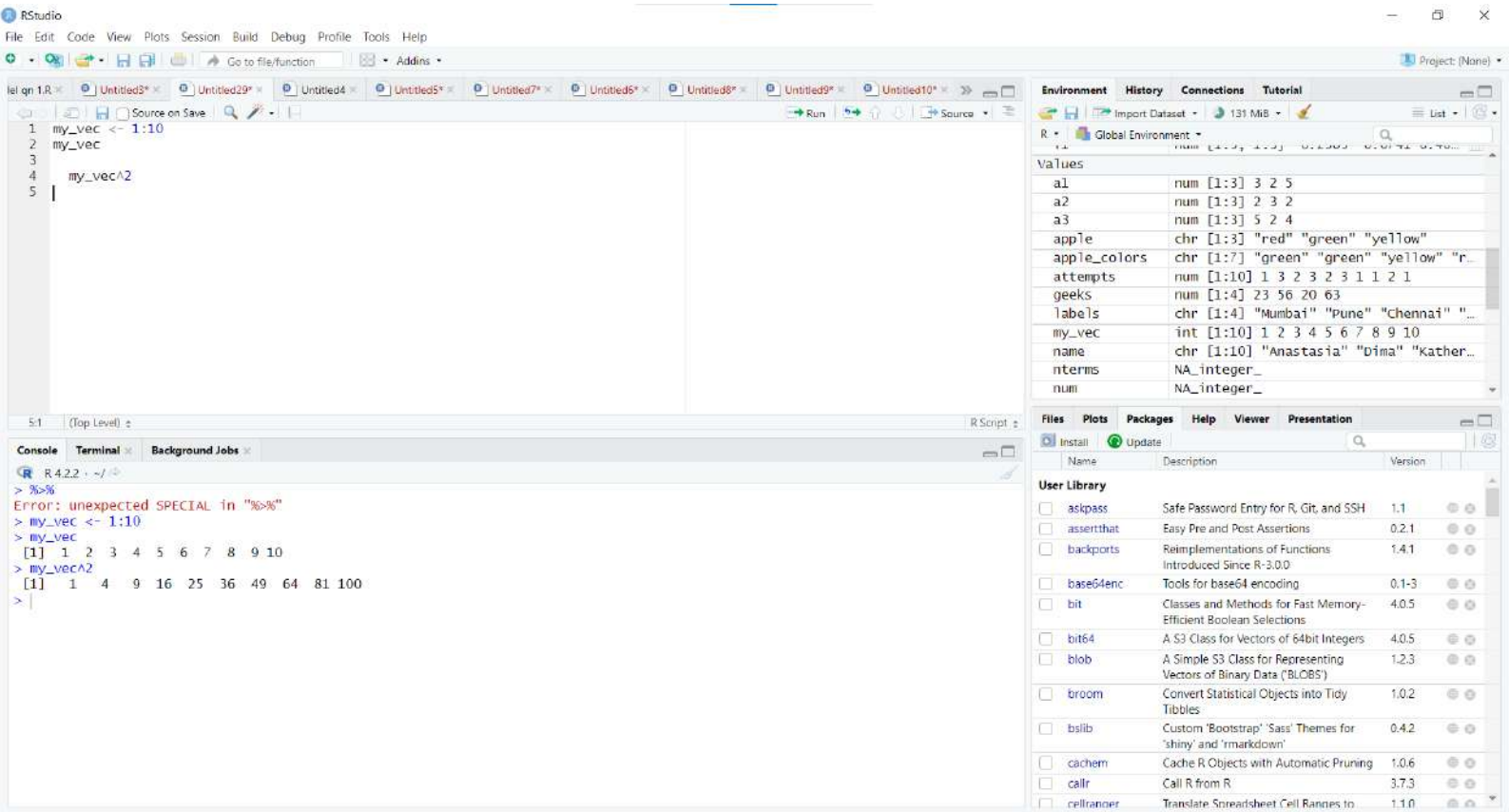

RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Untitled14*
Source on Save
Run
Source
# recursive functions
recur_fibo <- function(n) {
if(n <= 1) {
return(n)
} else {
return(recur_fibo(n-1) + recur_fibo(n-2))
}
}
# take input from the user
nterms = as.integer(readline(prompt="How many terms? "))
# check if the number of terms is valid
if(nterms <= 0) {
print("Plese enter a positive integer")
} else {
print("Fibonacci sequence:")
for(i in 0:(nterms-1)) {
print(recur_fibo(i))
}
}
(Top Level)
R Script
Console
Terminal
Background Jobs
R 4.2.2 · ~/
> # check if the number of terms is valid
> if(nterms <= 0) {
+ print("Plese enter a positive integer")
+ } else {
+ print("Fibonacci sequence:")
+ for(i in 0:(nterms-1)) {
+ print(recur_fibo(i))
+ }
+ }
Error in if (nterms <= 0) { : missing value where TRUE/FALSE needed
>
Environment
History
Connections
Tutorial
Import Dataset
122 MiB
List
R
Global Environment
Data
a 1 obs. of 1 variable
A num [1:2, 1:2] 2 0 1 3
b 196 obs. of 16 variables
B num [1:2, 1:2] 5 2 4 -1
data 1000 obs. of 9 variables
data1 1000 obs. of 9 variables
df 10 obs. of 4 variables
input 32 obs. of 2 variables
list1 List of 3
m int [1:2, 1:4] 1 2 3 4 5 6 7 8
M num [1:2, 1:3] 2 1 6 10 5 4
Files
Plots
Packages
Help
Viewer
Presentation
Install
Update
Name
Description
Version
User Library
askpass Safe Password Entry for R, Git, and SSH 1.1
assertthat Easy Pre and Post Assertions 0.2.1
backports Reimplementations of Functions Introduced Since R-3.0.0 1.4.1
base64enc Tools for base64 encoding 0.1-3
bit Classes and Methods for Fast Memory-Efficient Boolean Selections 4.0.5
bit64 A S3 Class for Vectors of 64bit Integers 4.0.5
blob A Simple S3 Class for Representing Vectors of Binary Data ('BLOBS') 1.2.3
broom Convert Statistical Objects into Tidy Tibbles 1.0.2
bslib Custom 'Bootstrap' 'Sass' Themes for 'shiny' and 'rmarkdown' 0.4.2
cachem Cache R Objects with Automatic Pruning 1.0.6
callr Call R from R 3.7.3
cellranger Translate Spreadsheet Cell Ranges to


RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Untitled3*
Source on Save
Run
Source
#1
num = as.integer(readline(prompt = "Enter a number: "))
if(num < 0) {
print("Enter a positive number")
} else {
sum = 0
# use while loop to iterate until zero
while(num > 0) {
sum = sum + num
num = num - 1
}
print(paste("The sum is", sum))
}
13:2 (Top Level) R Script
Console Terminal Background Jobs
R 4.2.2 · ~/
> num = as.integer(readline(prompt = "Enter a number: "))
Enter a number: if(num < 0) {
Warning message:
NAs introduced by coercion
> print("Enter a positive number")
[1] "Enter a positive number"
> } else {
Error: unexpected '}' in "}"
>
Environment History Connections Tutorial
Import Dataset 131 MiB
Global Environment
T1 num [1:3, 1:3] -0.2963 -0.0741 0.40...
Values
a1 num [1:3] 3 2 5
a2 num [1:3] 2 3 2
a3 num [1:3] 5 2 4
apple chr [1:3] "red" "green" "yellow"
apple_colors chr [1:7] "green" "green" "yellow" "r...
attempts num [1:10] 1 3 2 3 2 3 1 1 2 1
geeks num [1:4] 23 56 20 63
labels chr [1:4] "Mumbai" "Pune" "Chennai" "...
name chr [1:10] "Anastasia" "Dima" "Kather...
nterms NA_integer_
num NA_integer_
Files Plots Packages Help Viewer Presentation
Install Update
Name Description Version
User Library
askpass Safe Password Entry for R, Git, and SSH 1.1
assertthat Easy Pre and Post Assertions 0.2.1
backports Reimplementations of Functions Introduced Since R-3.0.0 1.4.1
base64enc Tools for base64 encoding 0.1-3
bit Classes and Methods for Fast Memory-Efficient Boolean Selections 4.0.5
bit64 A S3 Class for Vectors of 64bit Integers 4.0.5
blob A Simple S3 Class for Representing Vectors of Binary Data ('BLOBS') 1.2.3
broom Convert Statistical Objects into Tidy Tibbles 1.0.2
bslib Custom 'Bootstrap' 'Sass' Themes for 'shiny' and 'rmarkdown' 0.4.2
cachem Cache R Objects with Automatic Pruning 1.0.6
callr Call R from R 3.7.3
cellranger Translate Spreadsheet Cell Ranges to


RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function
Addins
Project: (None)
Untitled3*
Untitled29*
Untitled4
Untitled5*
Untitled7*
Untitled6*
Untitled8*
Untitled9*
Untitled10*
Source on Save
Run
Source
1 my_vec <- 1:10
2 my_vec
3
4 my_vec^2
5
5:1 (Top Level)
R Script
Console
Terminal
Background Jobs
R 4.2.2 · ~/
> %>%
Error: unexpected SPECIAL in "%>%"
> my_vec <- 1:10
> my_vec
[1] 1 2 3 4 5 6 7 8 9 10
> my_vec^2
[1] 1 4 9 16 25 36 49 64 81 100
>
Environment
History
Connections
Tutorial
Import Dataset
131 MiB
List
R
Global Environment
Values
a1 num [1:3] 3 2 5
a2 num [1:3] 2 3 2
a3 num [1:3] 5 2 4
apple chr [1:3] "red" "green" "yellow"
apple_colors chr [1:7] "green" "green" "yellow" "r...
attempts num [1:10] 1 3 2 3 2 3 1 1 2 1
geeks num [1:4] 23 56 20 63
labels chr [1:4] "Mumbai" "Pune" "Chennai" "...
my_vec int [1:10] 1 2 3 4 5 6 7 8 9 10
name chr [1:10] "Anastasia" "Dima" "Kather...
nterms NA_integer_
num NA_integer_
Files
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Install
Update
Name
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User Library
askpass Safe Password Entry for R, Git, and SSH 1.1
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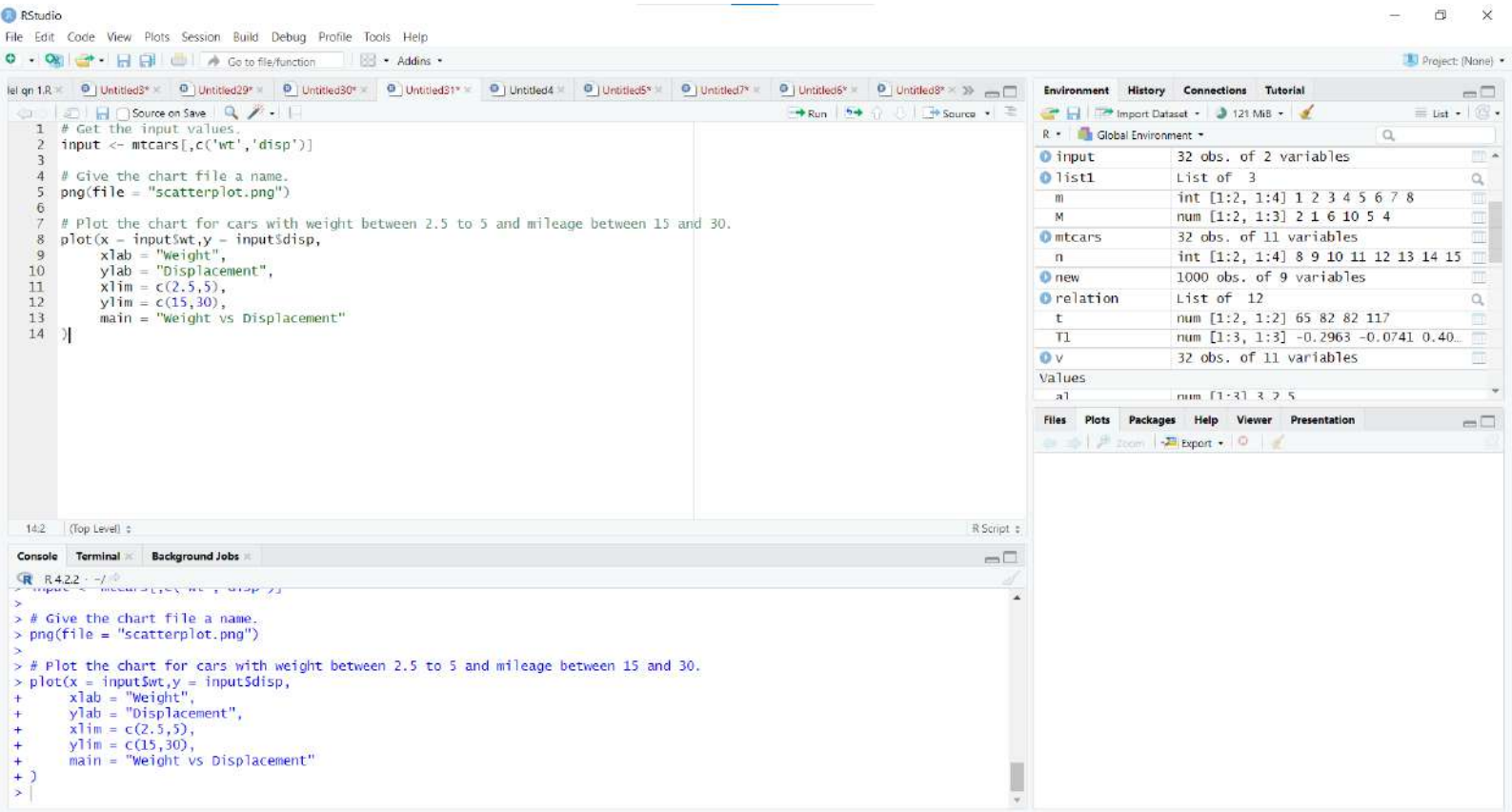
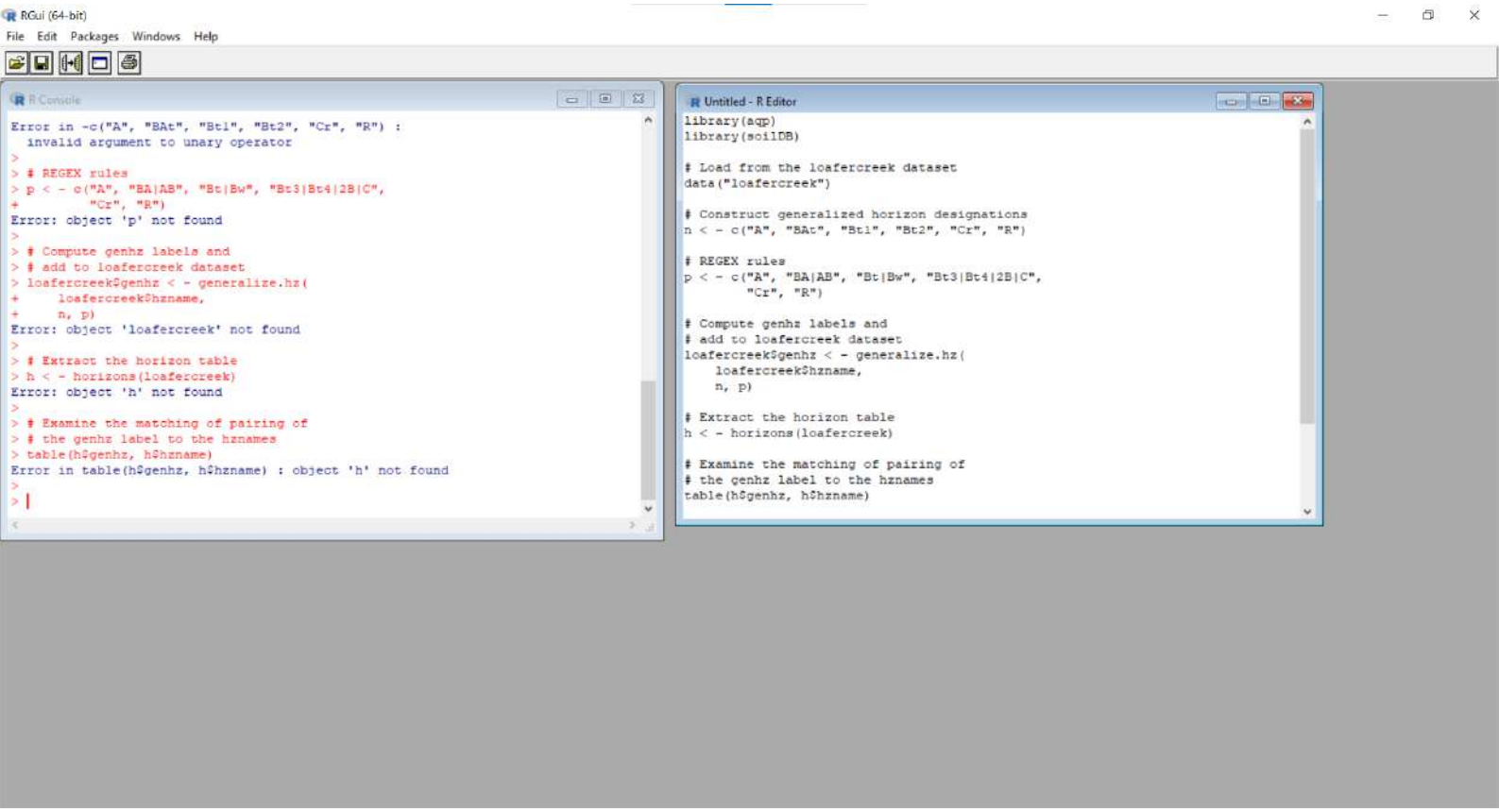
base64enc Tools for base64 encoding 0.1-3
bit Classes and Methods for Fast Memory-Efficient Boolean Selections 4.0.5
bit64 A S3 Class for Vectors of 64bit Integers 4.0.5
blob A Simple S3 Class for Representing Vectors of Binary Data ('BLOBS') 1.2.3
broom Convert Statistical Objects into Tidy Tibbles 1.0.2
bslib Custom 'Bootstrap' 'Sass' Themes for 'shiny' and 'rmarkdown' 0.4.2
cachem Cache R Objects with Automatic Pruning 1.0.6
callr Call R from R 3.7.3
cellranger Translate Spreadsheet Cell Ranges to


RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function
Addins
Project: (None)
Untitled3* Untitled29* Untitled30* Untitled31* Untitled4 Untitled5* Untitled7* Untitled6* Untitled8*
Source on Save
Run
Source
1 # Get the input values.
2 input <- mtcars[,c('wt','disp')]
3
4 # Give the chart file a name.
5 png(file = "scatterplot.png")
6
7 # Plot the chart for cars with weight between 2.5 to 5 and mileage between 15 and 30.
8 plot(x = input$wt,y = input$disp,
9 xlab = "Weight",
10 ylab = "Displacement",
11 xlim = c(2.5,5),
12 ylim = c(15,30),
13 main = "Weight vs Displacement"
14)
14:2 (Top Level)
R Script
Environment History Connections Tutorial
Import Dataset
121 MiB
List
R
Global Environment
input 32 obs. of 2 variables
list1 List of 3
m int [1:2, 1:4] 1 2 3 4 5 6 7 8
M num [1:2, 1:3] 2 1 6 10 5 4
mtcars 32 obs. of 11 variables
n int [1:2, 1:4] 8 9 10 11 12 13 14 15
new 1000 obs. of 9 variables
relation List of 12
t num [1:2, 1:2] 65 82 82 117
T1 num [1:3, 1:3] -0.2963 -0.0741 0.40...
v 32 obs. of 11 variables
Values
Files Plots Packages Help Viewer Presentation
Export
Console Terminal Background Jobs
R 4.2.2 · ~/
> # Give the chart file a name.
> png(file = "scatterplot.png")
> # Plot the chart for cars with weight between 2.5 to 5 and mileage between 15 and 30.
> plot(x = input$wt,y = input$disp,
+ xlab = "Weight",
+ ylab = "Displacement",
+ xlim = c(2.5,5),
+ ylim = c(15,30),
+ main = "Weight vs Displacement"
+)


RGui (64-bit)
File Edit Packages Windows Help
R Console
Error in -c("A", "BAt", "Bt1", "Bt2", "Cr", "R") :
invalid argument to unary operator
> # REGEX rules
> p < - c("A", "BA|AB", "Bt|Bw", "Bt3|Bt4|2B|C",
+ "Cr", "R")
Error: object 'p' not found
> # Compute genhz labels and
> # add to loafercreek dataset
> loafercreek$genhz < - generalize.hz(
+ loafercreek$hzname,
+ n, p)
Error: object 'loafercreek' not found
> # Extract the horizon table
> h < - horizons(loafercreek)
Error: object 'h' not found
> # Examine the matching of pairing of
> # the genhz label to the hznames
> table(h$genhz, h$hzname)
Error in table(h$genhz, h$hzname) : object 'h' not found
Untitled - R Editor
library(aqp)
library(soilDB)
# Load from the loafercreek dataset
data("loafercreek")
# Construct generalized horizon designations
n < - c("A", "BAt", "Bt1", "Bt2", "Cr", "R")
REGEX rules
p < - c("A", "BA|AB", "Bt|Bw", "Bt3|Bt4|2B|C",
"Cr", "R")
Compute genhz labels and
add to loafercreek dataset
loafercreek$genhz < - generalize.hz(
loafercreek$hzname,
n, p)
Extract the horizon table
h < - horizons(loafercreek)
# Examine the matching of pairing of
# the genhz label to the hznames
table(h$genhz, h$hzname)

RGui (64-bit)

File Edit Packages Windows Help

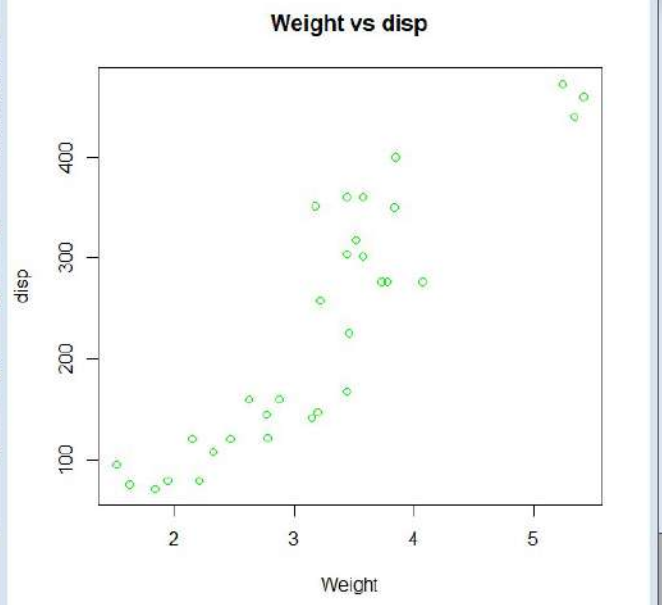
Untitled - R Editor

```
#4
a$cyl <- factor(a$cyl)
mylm <- lm(mpg ~ cyl, data = a)
summary(mylm)$coef

with(a, tapply(mpg, cyl, mean))

#5

min(a$wt)
max(a$wt)


##3rd

#1

plot(x = a$wt,y = a$disp,
   xlab = "Weight",
   ylab = "disp",
   main = "Weight vs disp",
    col="green"
)
```

R Console

```
Warning mes
1: In plot.w
2: In plot.x
3: In axis(s
  "color" is
4: In axis(s
  "color" is
5: In box(.
6: In title
>
> plot(x = a
+     xlab =
+     ylab =
+     main =
+      col="k
+ )
> )
Error: unexp
> plot(x = a
+     xlab =
+     ylab =
+     main =
+      col="g
+ )
>
```

R Graphics: Device 2 (ACTIVE)



Activate Windows

Type here to search

26°C 7:25 PM 1/27/2023

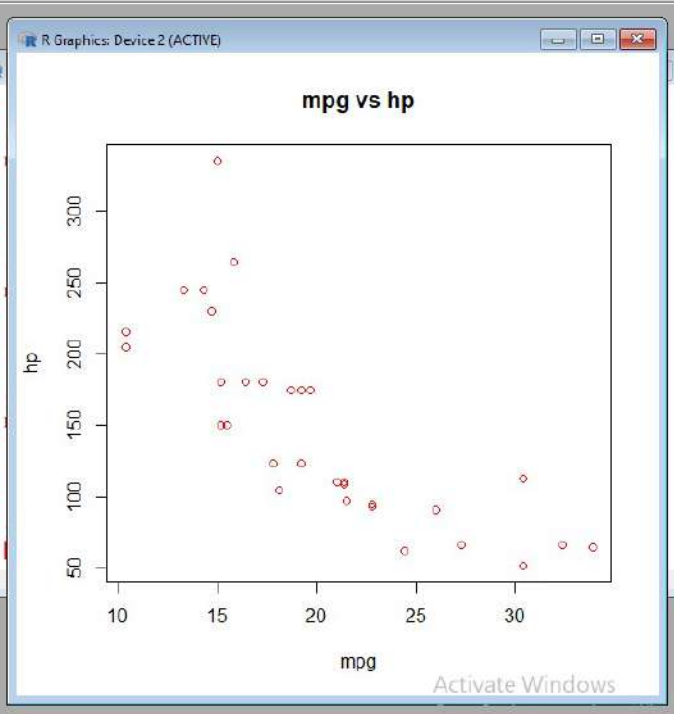
RGui (64-bit)

File History Resize Windows

Untitled - R Editor

```
#5

min(a$wt)
max(a$wt)


##3rd

#1

plot(x = a$wt,y = a$disp,
   xlab = "Weight",
   ylab = "disp",
   main = "Weight vs disp",
    col="green"
)

#2

plot(x = a$mpg,y = a$hp,
   xlab = "mpg",
   ylab = "hp",
   main = "mpg vs hp",
    col="red",

)
```

R Graphics: Device 2 (ACTIVE)



Type here to search

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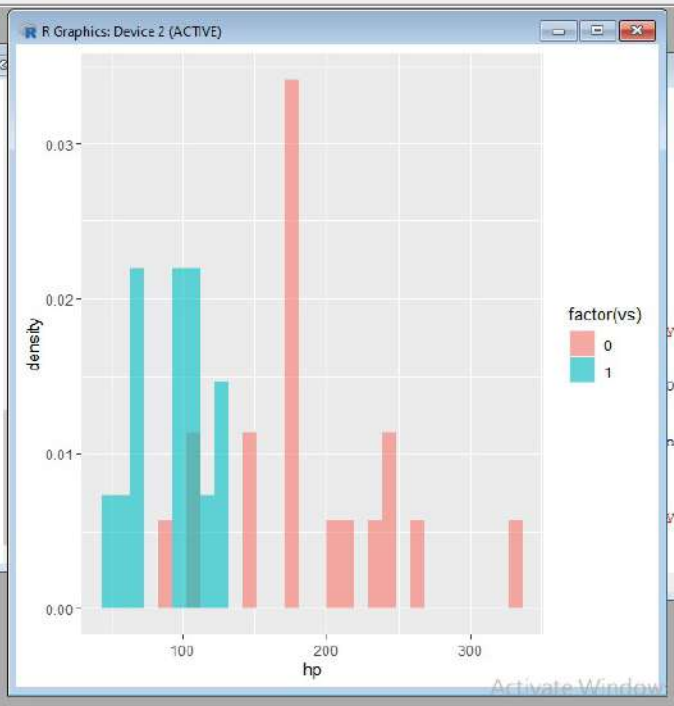
RGui (64-bit)

File History Resize Windows

Untitled - R Editor

```
##3rd

#1

plot(x = a$wt,y = a$disp,
   xlab = "Weight",
   ylab = "disp",
   main = "Weight vs disp",
    col="green"
)

#2

plot(x = a$mpg,y = a$hp,
   xlab = "mpg",
   ylab = "hp",
   main = "mpg vs hp",
    col="red",

)

#5

library(ggplot2)
ggplot(a, aes(hp, fill=factor(vs))) +
  geom_histogram(aes(y=..density..), alpha=0.6, position="identity")
```



Activate Windows

Type here to search

26°C 7:35 PM 1/27/2023