

R version 4.4.2 (2024-10-31 ucrt) -- "Pile of Leaves"  
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 Platform: x86\_64-w64-mingw32/x64

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Natural language support but running in an English locale

R is a collaborative project with many contributors.  
 Type 'contributors()' for more information and  
 'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or  
 'help.start()' for an HTML browser interface to help.  
 Type 'q()' to quit R.

[Previously saved workspace restored]

```
> x<- read.table("/Users/Simon/Downloads/iris.csv", header = T, sep= ",")
> head(x)
  SepalLength SepalWidth PetalLength PetalWidth Species
1          5.1         3.5         1.4         0.2  setosa
2          4.9         3.0         1.4         0.2  setosa
3          4.7         3.2         1.3         0.2  setosa
4          4.6         3.1         1.5         0.2  setosa
5          5.0         3.6         1.4         0.2  setosa
6          5.4         3.9         1.7         0.4  setosa
> iris_original<-data.frame(x)
> dim(iris_original)
[1] 150  5
> iris_o_sample<-iris_original[sample(1:nrow(iris_original), size = 210), ]
Error in sample.int(length(x), size, replace, prob) :
  cannot take a sample larger than the population when 'replace = FALSE'
> iris_o_sample<-iris_original[sample(1:nrow(iris_original), size = 150), ]
> head(iris_o_sample)
  SepalLength SepalWidth PetalLength PetalWidth Species
93          5.8         2.6         4.0         1.2 versicolor
86          6.0         3.4         4.5         1.6 versicolor
23          4.6         3.6         1.0         0.2  setosa
127         6.2         2.8         4.8         1.8  virginica
91          5.5         2.6         4.4         1.2 versicolor
99          5.1         2.5         3.0         1.1 versicolor
> iris_o_sample<-iris_original[sample(1:nrow(iris_original), size = 150, replace = TRUE), ]
> head(iris_o_sample)
  SepalLength SepalWidth PetalLength PetalWidth Species
130          7.2         3.0         5.8         1.6  virginica
80          5.7         2.6         3.5         1.0 versicolor
8           5.0         3.4         1.5         0.2  setosa
63          6.0         2.2         4.0         1.0 versicolor
94          5.0         2.3         3.3         1.0 versicolor
18          5.1         3.5         1.4         0.3  setosa
> dim(iris_o_sample)
[1] 150  5
> # Set a random seed so your split is reproducible (optional but good practice)
> set.seed(123)
>
> # Randomly sample 70% for training
> train_index <- sample(1:nrow(iris_o_sample), size = 0.7 * nrow(iris_o_sample))
>
> # Create training and testing datasets
> iris_train <- iris_o_sample[train_index, ]
> iris_test <- iris_o_sample[-train_index, ]
>
> # Check the size
> dim(iris_train) # Should be around 105 rows
[1] 105  5
> dim(iris_test) # Should be around 45 rows
```

```
[1] 45 5
> install.packages("rpart") # Only if you don't have it installed
Installing package into 'C:/Users/Simon/AppData/Local/R/win-library/4.4'
(as 'lib' is unspecified)
--- Please select a CRAN mirror for use in this session ---
trying URL 'https://lib.stat.cmu.edu/R/CRAN/bin/windows/contrib/4.4/rpart_4.1.24.zip'
Content type 'application/zip' length 716854 bytes (700 KB)
downloaded 700 KB

package 'rpart' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
  C:\Users\Simon\AppData\Local\Temp\RtmpUz8d0S\downloaded_packages
> library(rpart)
Error in value[[3L]](cond) :
  Package 'rpart' version 4.1.23 cannot be unloaded:
  Error in unloadNamespace(package) : namespace 'rpart' is imported by 'ipred' so cannot be unload
ed
In addition: Warning message:
package 'rpart' was built under R version 4.4.3
> # Build the Decision Tree model
> dt_model <- rpart(Species ~ ., data = iris_train, method = "class")
Error in rpart(Species ~ ., data = iris_train, method = "class") :
  could not find function "rpart"
>
> # View a simple summary
> summary(dt_model)
Error: object 'dt_model' not found
> library(rpart)
Error in value[[3L]](cond) :
  Package 'rpart' version 4.1.23 cannot be unloaded:
  Error in unloadNamespace(package) : namespace 'rpart' is imported by 'ipred' so cannot be unload
ed
In addition: Warning message:
package 'rpart' was built under R version 4.4.3
> # Train the Decision Tree
> dt_model <- rpart(Species ~ ., data = iris_train, method = "class")
Error in rpart(Species ~ ., data = iris_train, method = "class") :
  could not find function "rpart"
>
> # View the model
> summary(dt_model)
Error: object 'dt_model' not found
>
```