**Lists, why would you need them? (2)**

A **list** in R is similar to your to-do list at work or school: the different items on that list most likely differ in length, characteristic, and type of activity that has to be done.

A list in R allows you to gather a variety of objects under one name (that is, the name of the list) in an ordered way. These objects can be matrices, vectors, data frames, even other lists, etc. It is not even required that these objects are related to each other in any way.

You could say that a list is some kind super data type: you can store practically any piece of information in it!

# Vector with numerics from 1 up to 10

my\_vector <- 1:10

# Matrix with numerics from 1 up to 9

my\_matrix <- matrix(1:9, ncol = 3)

# First 10 elements of the built-in data frame mtcars

my\_df <- mtcars[1:10,]

# Construct list with these different elements:

my\_list <- list(my\_vector, my\_matrix, my\_df)

# The variables mov, act and rev are available

# Finish the code to build shining\_list

shining\_list <- list(moviename = mov, actors = act, reviews = rev)

# shining\_list is already pre-loaded in the workspace

# Print out the vector representing the actors

shining\_list$actors

# Print the second element of the vector representing the actors

shining\_list$actors[2]

# Use the table from the exercise to define the comments and scores vectors

scores <- c(4.6, 5, 4.8, 5, 4.2)

comments <- c("I would watch it again", "Amazing!", "I liked it", "One of the best movies", "Fascinating plot")

# Save the average of the scores vector as avg\_review

avg\_review <- mean(scores)

# Combine scores and comments into the reviews\_df data frame

reviews\_df <- data.frame(scores, comments)

# Create and print out a list, called departed\_list

departed\_list <- list(movie\_title, movie\_actors, reviews\_df, avg\_review)

departed\_list