

# Basic object types: exercises

Claudius Gräbner-Radkowitsch

2023-03-29

## Contents

<b>1</b>	<b>Task 1</b>	<b>1</b>
<b>2</b>	<b>Task 2</b>	<b>1</b>
<b>3</b>	<b>Task 3</b>	<b>1</b>
<b>4</b>	<b>Task 4</b>	<b>2</b>

## 1 Task 1

Create a vector containing the numbers 2, 5, 2.4 and 11.

1. What is the type of this vector?
2. Replace the second element with 5.9.
3. Add the elements 3 and 1 to the beginning, and the elements "8.0" and "9.2" to the end of the vector.
4. Transform this vector into the type integer. What happens?

## 2 Task 2

1. What type is the following vector: "2", "Hello", 4.0, and TRUE
2. What hierarchy is underlying this?

## 3 Task 3

1. Create a vector with the numbers from -8 to 9 (step size: 0.5)
2. Compute the square root of each element of the first vector using vectorisation. Anything that draws your attention?

## 4 Task 4

Create a list that has three named elements: "A", "B", and "C"

- The element "A" should contain the square root of the numbers from -2 to 8 (step size: 1)
- The element "B" should contain the log of numbers between 2 and 4 (step size: 0.5)
- The element "C" should contain letters from `a1` to `g7` (hint: use the pre-defined vector `letters` and the function `paste()`)

[Link to the solutions](#)