rmarkdown

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### Exercise 1 - create an object a with element (value) 1

a <- 1

We can see that value 1 is assigned to a, but we cannot verify that it is indeed stored.

### Exercise 2 - verify that 1 is stored in a

a

## [1] 1

Pfff. Luckily there is nothing to worry about. The value 1 is indeed stored in object a. Have you noticed that these lines of text do not contain more than 80 characters? That is the conventional rule that has been agreed upon by the council of R-nerds. Just kidding, but it is somehow convenient. Much more convenient than having a line of code that kind of extends beyond the 80 characters mark. But in Markdown this is not an issue!

### Exercise 3 - square a

a^2

## [1] 1

Still 1, that’s nice!

### Exercise 4 - create b and assign a+a. Check if b is indeed a+a.

b <- a + a  
b == a + a

## [1] TRUE

True! R is telling us that the equality we tested is indeed true. In other words, everything before the == is equal to that which is posed after the ==. Now we are talking.

### Exercise 5 - square b, multiply the answer with and call the result c. Then, take the square root of and multiply it with .

c <- b^2 \* (a / b)  
sqrt(c^b) \* (a / b^6)

## [1] 0.03125

Nice! But anything beyond a couple of decimals may not be relevant.

### Exercise 6 - round the answer from the previous exercise to 3 decimals.

round(sqrt(c^b) \* (a / b^6), 3)

## [1] 0.031

or, alternatively

d <- sqrt(c^b) \* (a / b^6)  
round(d, 3)

## [1] 0.031

Do you notice that the first solution is shorter, but the second is much more insightful? If you share your code, or plan to use it later on, clarity is of great importance. A small effort now, saves you hours later.

Now you know how to use R as a calculator and R-Studio as a typesetting device.

End of exercise