

Exercises for Data-driven Ecology

Fanglin

2025-04-17

Suggestion to complete exercises in R markdown files, which will allow to combine code chunks, graphical output, and written answers in a single, easy-to-read files.

hwk-01: understanding the core concepts of R

Assigning 10 and 20 to x and y, respectively.

```
x <- 10  
y <- 20
```

Calculating the product of x multiple y, and storing the result in a new object z

```
z <- x * y  
z
```

```
## [1] 200
```

The numbers below are the first ten days of rainfall amounts (0.1, 0.6, 33.8, 1.9, 9.6, 4.3, 33.7, 0.3, 0.0 0.1) in 1996. Create a vector using the c() function.

```
rainfall <- c(0.1, 0.6, 33.8, 1.9, 9.6, 4.3, 33.7, 0.3, 0.0, 0.1)
```

Based on the vector, and answer the following questions: 1) What was the mean rainfall, how about the standard deviation?

```
mean(rainfall)
```

```
## [1] 8.44
```

```
sd(rainfall)
```

```
## [1] 13.66473
```

Which day saw the highest rainfall (write code to get the answer)?

```
which.max(rainfall)
```

```
## [1] 3
```