Beginings

Al

2026-01-06

R programming Course notes

Following the first course beginings. They are telling me how to begin to understand the syntax of R. For example

```
x <- 1 ## <- assignment of value to a variable. This line is assigning the value 1 to the variable x
print(x) ## outputs in the terminal the value of x
```

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

```
x ## Auto-prints the value of x
```

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

```
msg <- "Hello" ## Assigning a string
msg
```

```
## [1] "Hello"
```

```
x <- 1:20 ## Creating a vector populated with the values from 1 to 20 in their respective positions.
x
```

```
##  [1]  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20
```

Data Types

R has 5 basic or "atomic" classes of objects:

- character
- numeric
- integer
- complex
- logical (boolean)

Objects

The most basic object is a vector

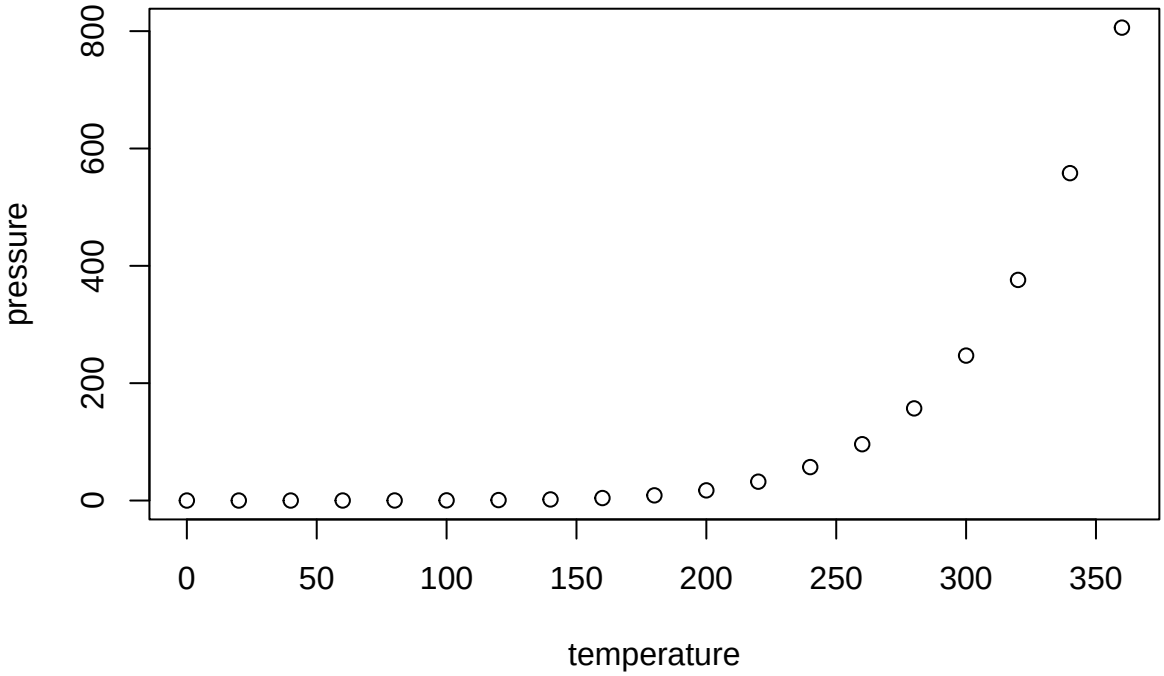
- A vector can only contain objects of the same class
- *list* is a vector that can contain different classes

Empty vector is created by the vector() function.

Numbers

Numbers in R are always treated as doubles. If you want an integer specifically you need to use the L suffix (ex. 1 is double, 1L is an integer). Inf is a special number which represents infinity. Also represented as (1/0). NaN represents an undefined value or missing number.

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.