

Lab 1

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Questions that you need to answer are in **bold**. Add your answers in the spaces provided, you may delete any blanks, _____, but do not delete the question text.

The sections of this lab match those in the Programming Basics primer on Rstudio Cloud, so you might like to tackle them as you work through the primer.

Functions

Use the `exp()` function, to find the exponential of 10.

```
exp(10)
```

```
## [1] 22026.47
```

How would you open the help page for the `exp()` function?

```
?exp()
```

Arguments

Consider the code in the following chunk:

```
round(3.141593, digits = 2)
```

```
## [1] 3.14
```

How many arguments are being passed to `round()`? _____ 2 arguments

What is the name of the argument that is being passed the value 3.141593? _____ it's been called "x" in default.

Objects

This code generates a sequence of values from 0 to 1 in steps of 0.05.

```
steps <- seq(0, 1, 0.05)
length(steps)
```

```
## [1] 21
```

Edit the chunk above to: save the values to an object called `steps`, then use the `length()` function to find the length of `steps`.

Vectors

Consider the vector `catfood_servings`:

```
catfood_servings <- c(Scylla = 3, Dexter = 5, Underfloor = 4)
```

Extract the 2nd element of `catfood_servings`.

```
catfood_servings[2]
```

```
## Dexter  
##      5
```

Extract the element with the name `Dexter`

```
catfood_servings["Dexter"]
```

```
## Dexter  
##      5
```

Types

```
heights <- c("172", "167", "96", "202", "150")  
names <- c("Luke Skywalker", "C-3PO", "R2-D2", "Darth Vader", "Leia Organa")  
humans <- c(TRUE, FALSE, FALSE, TRUE, TRUE)
```

What type of object is `heights`? ____ char

What type of object is `names`? ____ char

What type of object is `humans`? ____ bool