

Creating functions

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Introduction to creating functions

Based on your experience with coding so far and after watching the videos, list three reason why creating our own functions is good practice for data science.

- It allows reusing code for other parts of a project or a future project
- It is less error prone that copy pasting code
- Code is more organized for you and others, so it is easier to read
- Allows deeper understanding of what your code is doing
- Useful to add data to data frames
- Allows getting specific values and requirements
- Invites you to be intentional on the code that you are writing __ Allows to be more in control of the outputs

Exercise 1

Part 1:

```
convert_pounds_to_grams <- function(pounds) {  
  grams = 453.6 * pounds  
  return(grams)  
}
```

```
convert_pounds_to_grams(10)
```

```
## [1] 4536
```

Part 2:

```
convert_pounds_to_grams <- function(pounds = 3.75) {  
  grams = 453.6 * pounds  
  return(grams)  
}
```

```
convert_pounds_to_grams() # this requires a default value in the function
```

```
## [1] 1701
```

```
# without default value
```

```
convert_pounds_to_grams(3.75)
```

```
## [1] 1701
```

```
convert_pounds_to_grams(pounds = 3.75)
```

```
## [1] 1701
```

Exercise 2

Part 1

```
get_mass_from_length_theropoda <- function(length){  
  mass <- 0.73 * length ^ 3.63  
  return(mass)  
}  
get_mass_from_length_theropoda(16)
```

```
## [1] 17150.56
```

Part 2

```
get_mass_from_length
```