Worksheet 10 - mapping

Wednesday, October 8, 2025

DS 002R - Jo Hardin

Name: _____

Names of people you worked with: _____

Among the group of you, how many people in class can you name?

Task: Explain how `c(1:3)` is being used as an argument in each line of code. Why is the output different?

Random uniform numbers, `runif()`

```
map(c(1:3), runif)

[[1]]
[1] 0.1499157

[[2]]
[1] 0.5948165 0.1950887

[[3]]
[1] 0.5367777 0.2196151 0.3811297
```

Random uniform numbers, `runif()` as an anonymous function.

```
map(c(1:3), ~runif(n = 2))

[[1]]
[1] 0.4621728 0.2790713

[[2]]
[1] 0.3602725 0.3453277

[[3]]
[1] 0.1741363 0.9644047
```

Solution:

The idea of an anonymous function is that it creates a full new function, with an argument only if specified.

```
~runif(n = 2)
```

Is exactly the same as:

```
function(.x){
  runif(n = 2)
}
```

Important note: `runif(n = 2)` does not have `.x` as an argument!!! So each time the `map()` goes through the function, it ignores the value of the input and runs `runif(n = 2)`.

```
map(c(10000000:10000002), ~runif(n = 2))
```

```
[[1]]
[1] 0.6084747 0.9809957

[[2]]
[1] 0.3837198 0.9046155

[[3]]
[1] 0.6207328 0.5680702
```

```
map(c("rainbow", "unicorn", "flowers"), ~runif(n = 2))
```

```
[[1]]
[1] 0.1587568 0.5259611

[[2]]
[1] 0.7222805 0.9548965

[[3]]
[1] 0.09594157 0.40610420
```