

Worksheet 11 - mapping

Wednesday, October 14, 2026

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] 0.473741
```

```
[[2]]
```

```
[1] 0.8475481 0.1529452
```

```
[[3]]
```

```
[1] 0.75550673 0.02859373 0.53851149
```

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

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

```
[[1]]
```

```
[1] 0.60296783 0.09842239
```

```
[[2]]
```

```
[1] 0.3628716 0.3118705
```

```
[[3]]
```

```
[1] 0.1830875 0.5217706
```

Solution:

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

```
\(x) runif(n = 2)
```

Is exactly the same as the following (which is not an anonymous function because the function has a name, `random_unif()`).

```
random_unif <- 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), \(x) runif(n = 2))
```

```
[[1]]  
[1] 0.6144046 0.3220511
```

```
[[2]]  
[1] 0.3886067 0.1043631
```

```
[[3]]  
[1] 0.9417627 0.3197440
```

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

```
[[1]]  
[1] 0.79046959 0.04995254
```

```
[[2]]  
[1] 0.02645064 0.60296130
```

```
[[3]]  
[1] 0.1741145 0.9529361
```