

# How to purrr safely()

FOUNDATIONS OF FUNCTIONAL PROGRAMMING WITH PURRR



**Auriel Fournier**  
Instructor

# safely()

```
a <- list("unknown", 10) %>%  
  map(safely(function(x)  
    x * 10,  
    otherwise = NA_real_))
```

```
[[1]]  
[[1]]$result  
[1] NA  
[[1]]$error  
<simpleError in x * 10: non-numeric  
argument to binary operator>  
  
[[2]]  
[[2]]$result  
[1] 100  
[[2]]$error  
NULL
```

# Reordering

```
a <- list("unknown", 10) %>%  
  map(safely(function(x)  
            x * 10,  
            otherwise = NA_real_)) %>%  
  transpose()
```

```
$result  
$result[[1]]  
[1] NA  
$result[[2]]  
[1] 100  
  
$error  
$error[[1]]  
<simpleError in x * 10:  
non-numeric argument to  
binary operator>  
$error[[2]]  
NULL  
...
```

# Let's purrr-actice!

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# Another way to possibly() purrr

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Instructor

```
a <- list(-10, "unknown", 10) %>%  
  map(safely(function(x)  
    x * 10,  
    otherwise = NA_real_))  
a
```

```
[[1]]  
[[1]]$result  
[1] -100  
[[1]]$error  
NULL  
  
[[2]]  
[[2]]$result  
[1] NA  
[[2]]$error  
<simpleError in x * 10: non-numeric  
argument to binary operator>  
  
[[3]]  
[[3]]$result  
[1] 100  
[[3]]$error  
NULL
```

# possibly()

```
a <- list(-10, "unknown", 10) %>%  
  map(possibly(function(x)  
    x * 10,  
    otherwise = NA_real_))
```

a

```
[[1]]  
[1] -100  
  
[[2]]  
[1] NA  
  
[[3]]  
[1] 100
```

# Let's purrr-actice!

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# purrr is a walk() in the park

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**Auriel Fournier**  
Instructor

# Why walk()?

```
short_list <- list(-10, 1, 10)  
short_list
```

```
[[1]]  
[1] -10  
  
[[2]]  
[1] 1  
  
[[3]]  
[1] 10
```

```
walk(short_list, print)
```

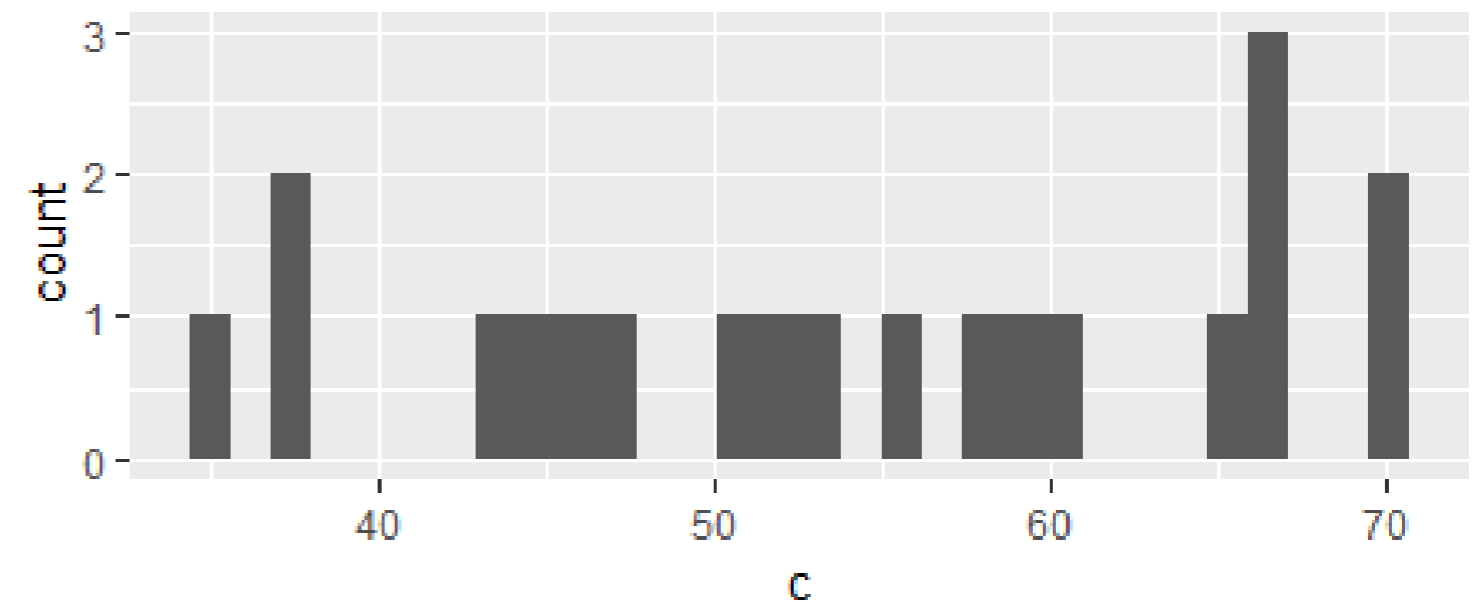
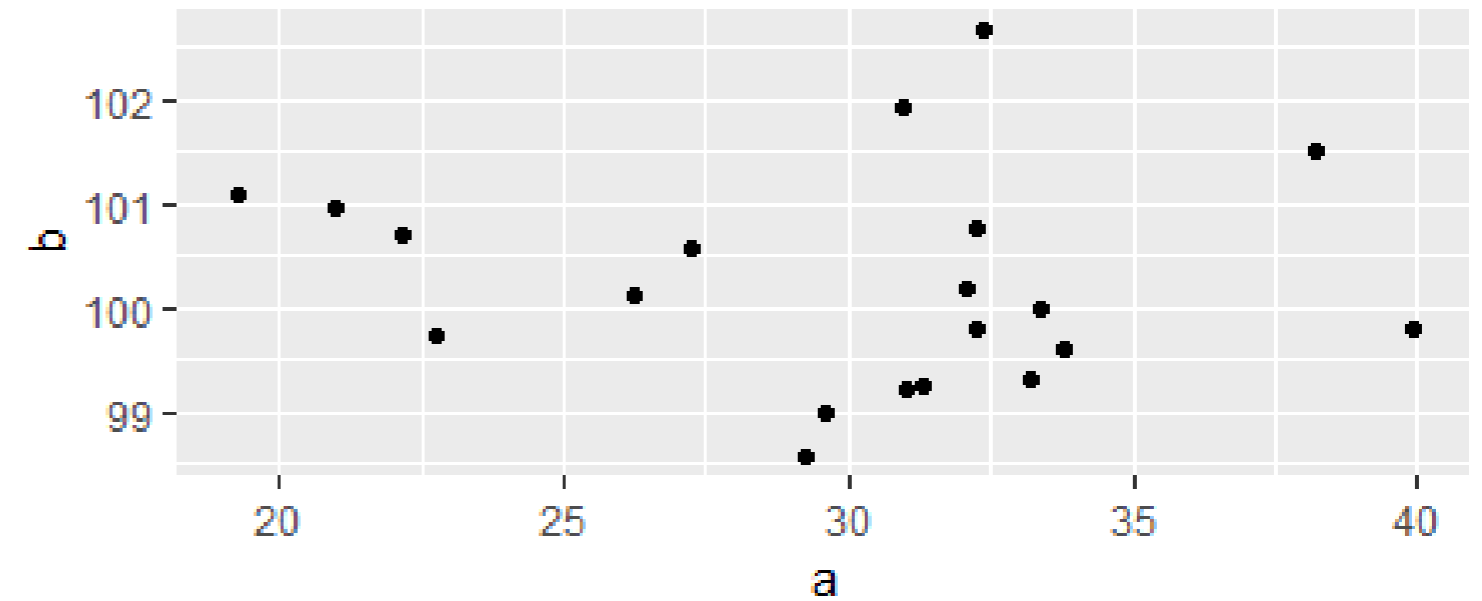
```
[1] -10  
[1] 1  
[1] 10
```

# Plots, the normal way

```
plist
```

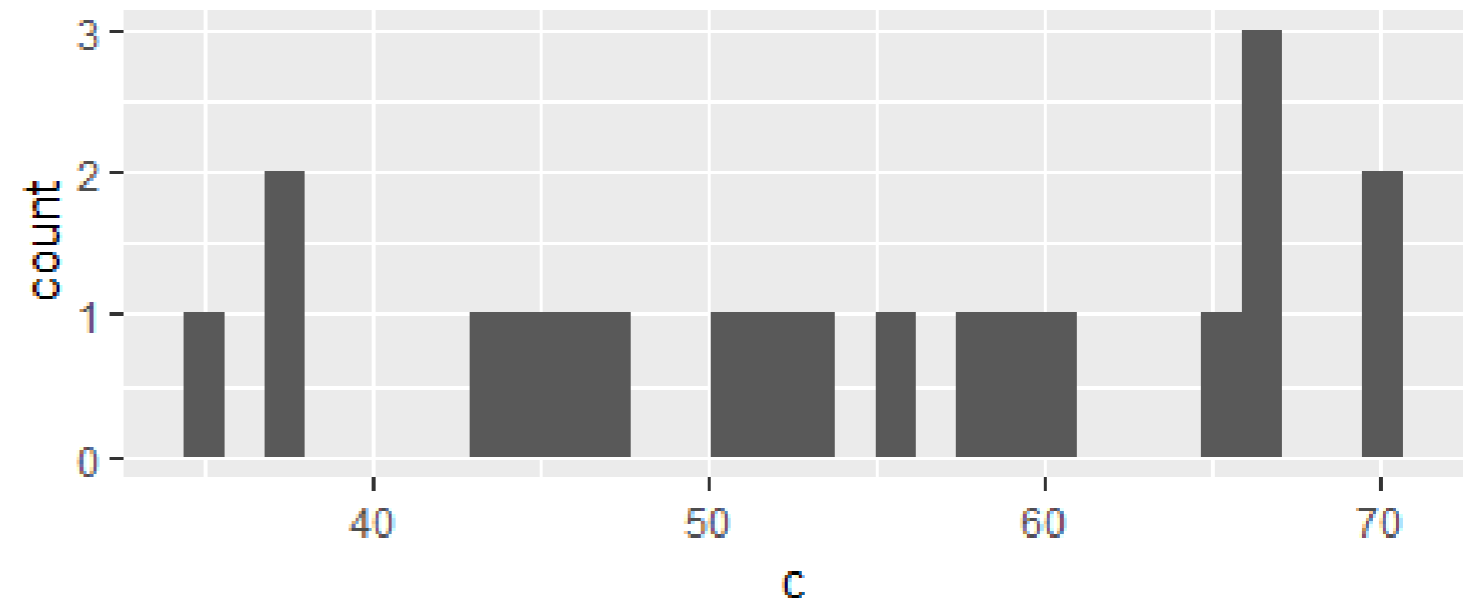
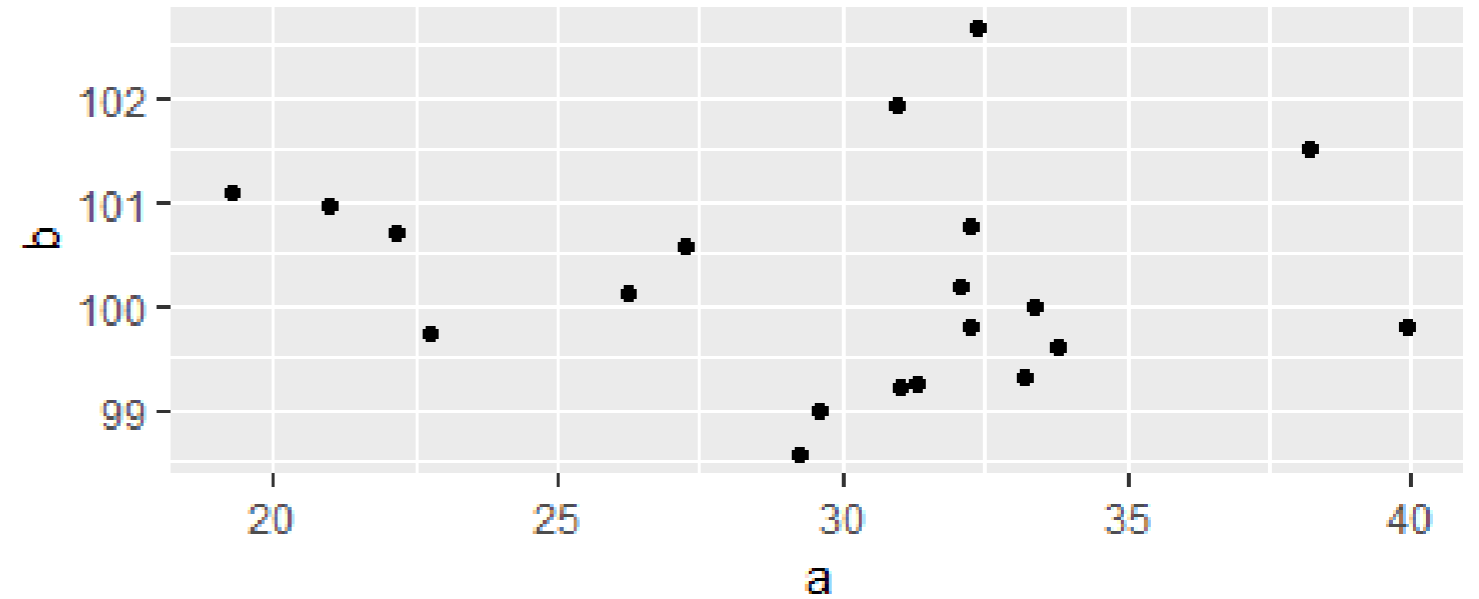
```
[[1]]
```

```
[[2]]
```



# walk() with plots

```
walk(plist, print)
```



# Let's purrr-actice!

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