

## Chaining Methods 2: Order Matters!

You have the following functions defined below (read them *carefully!*):

```
fun is-female(r): r["sex"] == "female" end
fun kilograms(r): r["pounds"] / 2.2 end
fun is-heavy(r): r["kilos"] > 25 end
```

The table `t` below represents four animals from the shelter:

name	sex	age	fixed	pounds
"Toggle"	"female"	3	true	48
"Fritz"	"male"	4	true	92
"Nori"	"female"	6	true	35.3
"Maple"	"female"	3	true	51.6

**Match** each Pyret expression (left) to the description of what it does (right). **Note: one description might match multiple expressions!**

`t.order-by("kilos", true)`

**1**  
(D)

**A**

Produces a table containing Toggle, Nori and Maple, with an extra column showing their weight in kilograms

`t.filter(is-female)  
 .build-column("kilos",  
kilograms)`

**2**  
(A)

**B**

Produces a table containing Maple, Nori and Toggle (in that order)

`t.build-column("kilos",  
kilograms)  
 .filter(is-heavy)`

**3**  
(C)

**C**

Produces a table containing only Fritz.

`t.filter(is-heavy)  
 .build-column("kilos",  
kilograms)`

**4**  
(D)

**D**

Won't run: will produce an error

`t.build-column("kilos",  
kilograms)  
 .filter(is-heavy)  
 .order-by("sex", true)`

**5**  
(C)

**E**

Produces a table containing only Fritz, with two extra columns.

`t.build-column("female",  
is-female)  
 .build-column("kilos",  
kilograms)  
 .filter(is-heavy)`

**6**  
(E)

**F**

Produces a table containing Maple and Fritz