

# Exercises - Session 14



In case you get stuck anywhere, don't be afraid to ask the coaches! They are here to help and will gladly explain everything to you!

Take notes during the exercises. Even if you never look at them again, they will help you memorise things!

## The Cat Organiser continued

In this exercise, we are going to build upon the past exercise and work some more on the cat organiser.

1. Cats should have 9 lives by default. Can you figure out a way to change your Cat class to make the following code possible?

```
irb(main):008:0> cat = Cat.new("Miffles", "tabby")
=> #<Cat:0x007f9435072e90 @name="Miffles", @lives=9, @coat="tabby">
```

Note that we're only passing 2 arguments, not 3 to the new method and the resulting cat still has 9 lives!

2. Now things get a bit gruesome. Cats can lose their lives one at a time. Write some code to make the following possible:

```
Miffles is a tabby cat that has 9 lives.
Sergeant Fuzzyboots is a black cat that has 5 lives.
Gorbatchev Puff-Puff Thunderhorse is a cream cat that has 7 lives.
What would you like to do? kill
What's the name of the cat to remove? Mittens
There is no cat called Mittens!
Miffles is a tabby cat that has 9 lives.
Sergeant Fuzzyboots is a black cat that has 5 lives.
Gorbatchev Puff-Puff Thunderhorse is a cream cat that has 7 lives.
What would you like to do? kill
What's the name of the cat to remove? Miffles
Miffles is a tabby cat that has 8 lives.
Sergeant Fuzzyboots is a black cat that has 5 lives.
Gorbatchev Puff-Puff Thunderhorse is a cream cat that has 7 lives.
What would you like to do?
```

Note that Miffles has lost one of its lives and has gone from 9 to 8 lives!

3. Another great function would be to remove dead cats automatically from the list of cats. If a cat reaches 0 lives, remove it from the cats array!

### Optional

4. Here's a hard one for those who still need an additional challenge: Notice how your cat organiser forgets all about your changes after you quit it. That's not great, is it? Figure out how to use the PStore class in the Ruby standard library to save your cats array to a file on your hard drive. The documentation and examples for this can be found here:

<https://ruby-doc.org/stdlib-2.4.0/libdoc/pstore/rdoc/PStore.html>