

Functional Programming	WS 2023/2024	LVA 703025
Live Exercises 4		Wednesday, November 08, 2023

Exercise 1 Equality and Polymorphism

Write a function threeEqual taking three arguments of the same, arbitrary type, which returns True if and only if all of them are equal.

What is the most general type signature of this function?

Examples:

```
threeEqual 1 1 1 == True
threeEqual True False False == False
```

Exercise 2 Polymorphic Types

- 1. Which of the following type signatures are equivalent?
 - (i) $a \rightarrow b \rightarrow a$
 - (ii) $c \rightarrow a \rightarrow c$
 - (iii) $a \rightarrow a \rightarrow a$
- 2. Write two different functions foo and bar of type $a \rightarrow a$. Here, different means that for some input values x and y, the result of foo x y is different from the result of bar x y.