```
def f  x  y =                          true → int → int
   if  x   then   y + 1  else                  ∧
       if  y  then    1  else  0       false → bool → int
end
```

$$(f \ true \ 2) + (f \ false \ true) + (f \ false \ false)$$

$$\underbrace{\qquad}_{3} \qquad \underbrace{\qquad}_{1} \qquad \underbrace{\qquad}_{0}$$

```
          def f  x =                  ∀α. α → α
             x                        ∀α. α → (α, α)
          end                         ∀α. (α, α) → α

          if f true then f 4 else f 8
```

How to compile

Polymorphism

- C: don't
- C++: templates (all the copies!)
- Java, etc.: generics (all values have common properties)

not allowed:
HashMap<int, int>