Zadanie 18

a) $\emptyset \vdash (+) :: Int \to (Int \to Int)$

b) $\emptyset \vdash (+37) :: Int \to Int$

c) $\emptyset \vdash append :: [\alpha] \to ([\alpha] \to [\alpha])$

d) $\emptyset \vdash append\ [1,2] :: [Int] \to [Int]$

e) $\emptyset \vdash map :: (\alpha \to \beta) \to [\alpha] \to [\beta]$

f) $\emptyset \vdash map\ square\ [1,2] :: [Int]$

g) map square ['a'] nie ma typowania

h) $\emptyset \vdash map\ length\ [['a']] :: [Int]$

i) $\emptyset \vdash foldl :: (\alpha \to \beta \to \alpha) \to \alpha \to [\beta] \to \alpha$

j) $\emptyset \vdash foldl\ (++) :: [\alpha] \to [[\alpha]] \to [\alpha]$

k) $\emptyset \vdash foldl\ (++)\ [] :: [[\alpha]] \to [\alpha]$

$\emptyset \vdash foldl\ (++)\ ['a','b'] :: [[Char]] \to [Char]$

e) $\{ f :: Int \to \alpha \} \vdash f\,7 :: \alpha$

m) $\emptyset \vdash (\backslash f \to f\,7) :: (Int \to \alpha) \to \alpha$

n) $\{ f :: \alpha \to Int,\ g :: \alpha \to Int,\ x :: \alpha \}$

$\vdash +\ (f\,x)\,(g\,x) :: Int$

o) $\{ f :: Int \to \alpha \to \beta, g :: Char \to \alpha \}$

$\vdash f\ 7\ (g\ 'a') :: \beta$

p) $\{ g :: \alpha \to \beta, x :: \alpha \}$

$\vdash (\backslash f \to f\ (g\ x)) :: (\beta \to \gamma) \to \gamma$

q) $\{ g :: \alpha \to Int, x :: \alpha \}$

$\vdash (\backslash f \to f\ (g\ x))\ square :: Int$

("bo" (\f → f (g x)) square

→ square (g x))