Exercise Set 8 — 29 October

8.1 Booleans and numbers - typing

(Continued from exercises 5, 6, and 7.)

Implement a simple type checker, namely a Haskell function `findType :: Term -> Maybe Typ`, where we have defined `data Typ = TypNat | TypBool`.

Then implement a version that produces a complete proof tree (according to the inference rules in Figures 8-1 and 8-2 of the textbook).