Idris Exercises: Part 3

Edwin Brady

Kats Idris Workshop, 21st May 2016

Questions

1. Using do notation, write a program which reads two strings then displays the length of the longer string. It should have the following type:

   \[
   \text{displayLonger : IO ()}
   \]

   Write a main program which calls displayLonger.

2. Rewrite displayLonger using the effects library:

   \[
   \text{displayLonger : Eff () [STDIO]}
   \]

   Update main correspondingly.

3. Write a function which implements a simple “guess the number” game. It should have the following type:

   \[
   \text{guess : (target : Nat) -> Eff () [STDOUT]}
   \]

4. Write a program which chooses a random Nat then invokes guess. It should have the following type:

   \[
   \text{runGuess : Eff () [RND, STDOUT]}
   \]

   (Hint: You can convert between numeric types using cast)