

Chapter 1

Hello

1.1 Introduction

This is an example of a so-called “conversational” program. It continuously asks the player what is on their mind, responding in a conciliatory manner until the player inputs "bye". This simple program nicely illustrates the structure that many of the more interesting programs will take viz. a continuous loop terminated by a special input.

```
module Hello where
import base : Data.Char (toLower, toUpper)
banner = "This is Hello (version 0)"
start :: IO ()
start = do
    mapM_ putStrLn banner
    putStrLn "Hello there!"
    putStrLn "What is your name?"
    name  $\leftarrow$  getLine
    putStrLn $ "Hi " ++ map toUpper name ++ "."
    loop name

loop :: String  $\rightarrow$  IO ()
loop name = do
    putStrLn $ "What's up, " ++ (toUpper < $ > name) ++ "?"
    response  $\leftarrow$  getLine
    if (toLower < $ > response)  $\equiv$  "bye"
    then putStrLn "Pleasure chatting with you - until next time!"
    else putStrLn "I understand"  $\gg$  loop name
```