The Virtual Learning Environment for Computer Programming

Haskell — FizzBuzz

P97301_en

In the famous article *Using FizzBuzz to Find Developers who Grok Coding* (which you can find at http://imranontech.com/2007/01/24/using-fizzbuzz-to-find-developers-who-grok-coding/), Imran Ghory explains that most programmers interviewed for a job cannot even write a simple program:

On occasion you meet a developer who seems like a solid programmer. They know their theory, they know their language. They can have a reasonable conversation about programming. But once it comes down to actually producing code they just don't seem to be able to do it well.

After a fair bit of trial and error I've discovered that people who struggle to code don't just struggle on big problems, or even smallish problems (i.e. write a implementation of a linked list). They struggle with tiny problems. So I set out to develop questions that can identify this kind of developer and came up with a class of questions I call "FizzBuzz Questions" named after a game children often play (or are made to play) in schools in the UK. An example of a Fizz-Buzz question is the following:

Write a program that prints the numbers from 0 to 100, but: For multiples of three print 'Fizz' instead of the number, and for the multiples of five print 'Buzz'. For numbers which are multiples of both three and five print 'FizzBuzz'.

Most good programmers should be able to write out on paper a program which does this in a under a couple of minutes. Want to know something scary? The majority of comp sci graduates can't. I've also seen self- proclaimed senior programmers take more than 10-15 minutes to write a solution.

Prove that you really can write such a program in Haskell, and with style! (But don't be too slow...)

Specification

Define the function

```
fizzBuzz :: [Either Int String]
```

that returns the infinite list of "FizzBuzz" for each integer starting from zero.

Sample input

take 8 fizzBuzz

Sample output

```
[Right "FizzBuzz", Left 1, Left 2, Right "Fizz", Left 4, Right "Buzz", Right "Fizz", Left 7]
```

Problem information

Author : Jordi Petit Translator : Jordi Petit Generation : 2024-05-03 09:52:16

© *Jutge.org*, 2006–2024. https://jutge.org