



KataFizzBuzz

[FrontPage](#) | [RecentChanges](#) | [Preferences](#)

About this Kata

This Kata was posted here by someone anonymously. Michael Feathers and [EmilyBache](#) performed it at agile2008 when competing in "Programming with the stars" in python, in 4 minutes.

Difficulty: Easy Good for teaching: [TDD](#), [BabySteps](#)

Problem Description

Imagine the scene. You are eleven years old, and in the five minutes before the end of the lesson, your Maths teacher decides he should make his class more "fun" by introducing a "game". He explains that he is going to point at each pupil in turn and ask them to say the next number in sequence, starting from one. The "fun" part is that if the number is divisible by three, you instead say "Fizz" and if it is divisible by five you say "Buzz". So now your maths teacher is pointing at all of your classmates in turn, and they happily shout "one!", "two!", "Fizz!", "four!", "Buzz!"... until he very deliberately points at you, fixing you with a steely gaze... time stands still, your mouth dries up, your palms become sweatier and sweatier until you finally manage to croak "Fizz!". Doom is avoided, and the pointing finger moves on.

So of course in order to avoid embarrassment in front of your whole class, you have to get the full list printed out so you know what to say. Your class has about 33 pupils and he might go round three times before the bell rings for breaktime. Next maths lesson is on Thursday. Get coding!

Write a program that prints the numbers from 1 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?".

Sample output:

```
1
2
Fizz
4
Buzz
Fizz
7
8
Fizz
Buzz
11
Fizz
13
14
FizzBuzz
16
17
Fizz
19
Buzz
... etc up to 100
```

Stage 2 - new requirements

- * A number is fizz if it is divisible by 3 or if it has a 3 in it
- * A number is buzz if it is divisible by 5 or if it has a 5 in it

Comments from those who are working on this Kata

(Comment from [MikeMinutillo](#)) The best use of the [KataFizzBuzz](#) is to introduce the concepts of TDD and [BabySteps](#) to a new [CodingDojo](#). In my case, I work with many clever people who don't do alot of automated testing and can't see how it could work. There are heaps of different ways to implement this [KataFizzBuzz](#) problem and it's easy to throw in new requirements (at the second step here does). I actually did learn TDD using FizzBuzz? (I went crazy with it too. Do a search for Enterprise FizzBuzz? to see the madness)

(Comment from [ThomasNilsson](#)) I tried this Kata with a group of newcomers to TDD and it worked out beautifully. It is a very simple problem so people are not thrown into ProblemSolvingMode? which is common with e.g. the [KataBowling](#), which has previously been my favourite.

Yet it is sufficient to let you talk about OpenYourMindToDesignFirst?, ListYourTests?, [BabySteps](#), TheSimplestThingThatCouldPossiblyWork?, HurryToGreen?, Refactor and CodeSmells?. It has a nice flow to it, no "humps" like again the [KataBowling](#). So this is my new favorite for introducing TDD.

I also tried adding the requirement that the filtering (Divisible by 3 => "Fizz") should be defined outside of the class so that the concept of a Filter is required. You can do that both initially and as an added complexity at the end.

Here is my [KataFizzBuzzSolution](#).

(Comment from [IlkerCetinkaya](#)) We tackled this Kata in our very first Dojo ([MucNetDojo](#)). It's a very good starter and we all enjoyed the simplicity. The easiness allows you to talk a little more about TDD, all the pro's and con's alongside. We did [KataFizzBuzz](#) with a group of hobbyists and pro's. The low logical complexity added value to teaming as well. I think we've chosen the right Kata to start with.

(Comment from Jonas Follesø) We solved this as our first Kata at Trondheim Coding Dojo. Our solution (.NET) is available at <http://github.com/follesoe/FizzBuzzKata> - Excellent introduction Kata.

(Comment from [RonRomero](#)) I used this kata to help teach myself Android development. I finished the standard [\[Android Hello World\]](#), but the [\[next sample app\]](#) was too huge and complex. So I worked thru FizzBuzz? as the second step in learning the Android. I wrote it up at <http://ziroby.wrodpres.com/2010/05/23/tdd-fizzbuzz-on-the-android/>

(Comment from [LaurentLaffont](#)) Done in a coding-doj with Pharo. Easy, great for teaching TDD. A [KataFizzBuzzSmalltalkSolution](#).

(Comment from Jack) Nicely Solved. I wrote it up.

[FrontPage](#) | [RecentChanges](#) | [Preferences](#)

This page is read-only | [View other revisions](#)

Last edited September 2, 2012 5:23 pm by [EmmanuelGaillot](#) ([diff](#))

Search: