

# Dickinson 2015: Fizz-Buzz-Whammy

The Fizz-Buzz problem is based on a popular game that is often played by children learning basic arithmetic. The basic rules of the game are as follows:

- Going around the room with each person taking a turn
- Count aloud from 1 except that if the number to be said is:
  - a multiple of 3 say “Fizz” instead
  - a multiple of 5 say “Buzz” instead
  - a multiple of both 3 and 5 say “FizzBuzz” instead.
- Stop when everyone gets bored.

This problem asks you to write a program that plays a more general and slightly more complicated version of this game. The rules for the game your program is to play are as follows:

- Given 4 integers A, B, C, D
- Print out the increasing integers from 1 except if the number to be printed is:
  1. A multiple of C print “Whammy” instead up until but not including the next multiple of A.
  2. A multiple of both A and B print “FizzBuzz” instead
  3. A multiple of A print “Fizz” instead
  4. A multiple of B print “Buzz” instead

Note that you must apply these rules in the order specified. If you match a rule, you should not attempt to match a rule later in the order.

- Stop when the computer gets bored. (Ok... stop after the value D would be printed – even if Fizz, Buzz, FizzBuzz or Whammy is printed instead of D).

## Input Format

The input will contain multiple instances of the problem. Each instance of the problem will consist of a single line of text containing 4 comma-delimited integers in the range [1...1000]. The input will be terminated by a line containing the value -1.

## Output Format

The output for each instance of the problem will be D+1 lines each containing either a single integer value, the word *Fizz*, the word *Buzz*, the word *FizzBuzz*, the word *Whammy*, or the word *Done*. The last line of output from each instance of the problem is a single line containing the word *Done*.

## Sample Input

```
2,3,7,10
2,3,4,10
-1
```

## Sample Output

```
1
Fizz
```

```
Buzz
Fizz
5
FizzBuzz
Whammy
Fizz
Buzz
Fizz
Done
1
Fizz
Buzz
Whammy
Whammy
FizzBuzz
7
Whammy
Whammy
Fizz
Done
```