

Functional Block Diagrams

How to make toast in 32767 easy steps

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A toaster

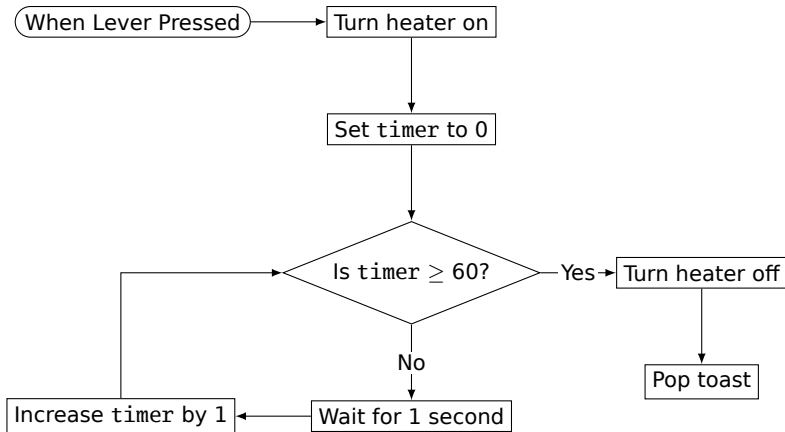


Figure 1: A toaster, as a flowchart.

A toaster

In so-called **pseudocode**, the same instructions might look like this:

```
when lever is pressed,  
    turn heater on  
    set timer to 0  
  
"time check":  
    if timer >= 60,  
        turn heater off  
        pop toast, and we're done!  
    otherwise,  
        wait for one second  
        increase timer by one  
        go back to "time check"
```

Same process, same flow, but different representation.
Nearly all of programming is coming up with the process!

FizzBuzz

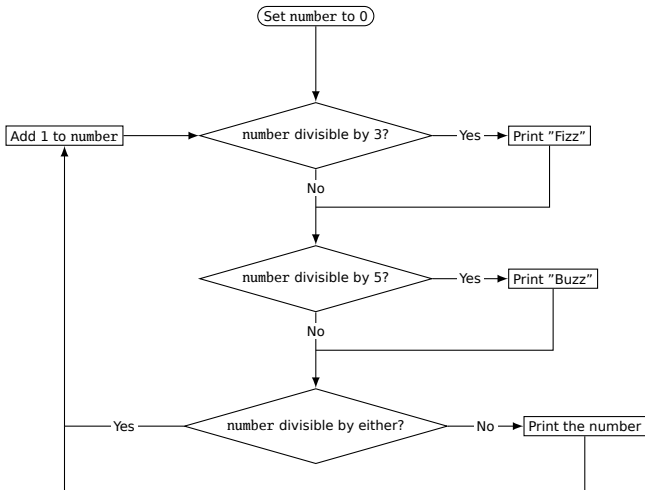


Figure 2: FizzBuzz as a flowchart.

FizzBuzz

Corresponding pseudocode might be:

```
set number to 0
"check number":
  if number is divisible by 3, print "Fizz"
  if number is divisible by 5, print "Buzz"
  if number is not divisible by either,
    print number itself
  add 1 to number
  go back to "check number"
```

The horror that is the NY subway system

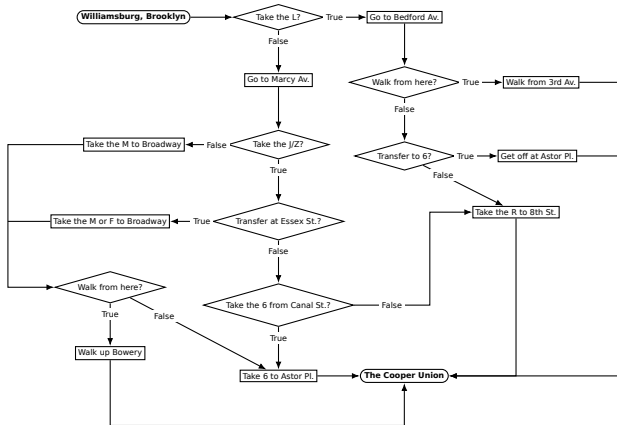


Figure 3: How to get to school from Williamsburg.