

# Coding Conundrums

Number three in a series of more than two. But probably less than a thousand.

## 3.1 Total Carp

People keep coming to me and bragging about the fish that they just caught. They tell me the make of the fish, "Carp" for example, and how much it weighed, 2000 grams for example.

I want a program into which I can type:

- The name of each latest fish
- The weight of each latest fish

When I enter a fish called "Finished" (fish pun alert) I want the program to print out:

- The heaviest fish (name and weight)
- The lightest fish (name and weight)
- The total weight of all the fish that have been entered

## 3.2 Fish Popularity Contest

It occurs to me that it would be useful to add another feature to the fish program above. I'd like to know which is the most popular fish. That way I can buy shares in it. Or something. So I've added the following extra requirement:

- The most popular fish (i.e. the fish that we have seen the most of)

Note that my keyboard skills are not very gud. And so if I type CARp rather than Carp I'd like the program to behave sensibly and count them both as the same make of fish.

## 3.2 Ingredients Tracker

Talking of food, I want something to keep track of ingredients that I might have in my kitchen.

My program will have two modes:

1. The program will start in this mode. I can enter the name and amount of each ingredient. If I type in the name "Search" the program will go into mode 2 (see below).
2. I can type the name of an ingredient and the program will tell me how much of that ingredient I have in stock. If I type in the name "Enter" the program will go into mode 1 (see above)

If you fancy getting clever, you can add a third command, "List", which will list out all the ingredients that have been entered.

This is making me quite hungry. I think I'll go off for a pie while you work on these.

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