Functional Decomposition

To practice with functions, let's revisit Homework 00.
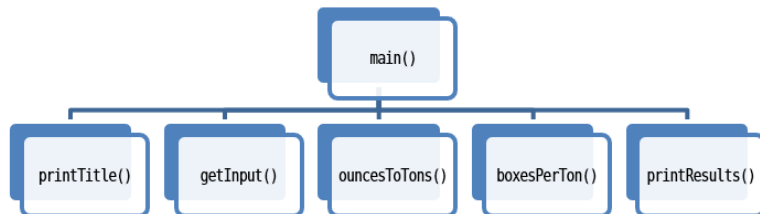
> *A metric ton is* **35,273.92** *ounces. Write a program that will read the weight of a package of breakfast cereal in ounces and output the weight in metric tons as well as the number of boxes needed to yield one metric ton of cereal.*
>
> *--Savitch, Absolute C++ 5ᵗʰ Edition, Chapter 2*

On the next page, you'll see the `main` function for an **IPO program**, which starts by ==calling functions== for input, output and processing.

```
 1  int main()
 2  {
 3      printTitle();
 4      double ouncesPerBox = getInput();
 5      double tons = ouncesToTons(ouncesPerBox);
 6      double boxes = boxesPerTon(tons);
 7      printResults(tons, boxes);
 8
 9      return 0;
10  }
```

This method, starting at the highest level, and breaking the program into smaller and smaller functions, is called ==top down design== or ==procedural decomposition==.