Assignment 5 - Algorithms and Flowcharts

due Friday, October 25

Question 1

Use stepwise decomposition to develop algorithms to solve each of the following problems. In each case use at least 3 levels of decomposition: break the problem into steps and break each of these steps into sub-steps. Create at least 3 steps per new level so that the end result has a total of at least 9 steps.

- making a phone call
- cooking an egg (your favourite style)
- borrowing a book from the library

Question 2

Come up with an algorithm for computing the (minimum) number of quarters, dimes, nickels and pennies that add up to a value n ($n < 100$). Draw a flowchart for this algorithm.

Question 3

Draw a flowchart for the C program given as the solution to Lab 1. Note that function and variable declarations are not included in flowcharts.