A program for writing a simple program

1) Make yourself an example or two of input-to-output pairs;

2) Using the examples, think:
   What are the quantities in play (these will be your variables) ?
   How am I using them to obtain the output from the input?

   Write down a rough step-by-step description of the procedure in plain English;

3) Can you easily write the code for each step?
   Or do steps need to be broken down into simpler steps?
       E.g., ask yourself:
           Where do I get the initial values for the variables from?
           Do I need variables to store intermediate results?
   If so, keep breaking down your steps as much as needed;

4) Write the code for one simple step at a time, and debug it;

5) Celebrate;