Programming Steps

Problem-Solving Phase

1. Analysis and specification.
   (Define problem and what solution must do.)

2. General solution (algorithm).
   (Develop logical sequence of steps to solve problem.)

3. Verify.
   (follow steps - by hand.)

Implementation Phase

1. Specific solution (program).
   (Translate algorithm to code.)

2. Test.
   (Check computed results manually.)

Maintenance Phase

1. Use the program.

   (Modify to meet changed requirements or to correct errors.)

Five Phases of Programming

1. State the problem clearly.
2. Describe the input and output information.
3. Work the problem by hand (or with a calculator) for a specific set of data.
4. Develop a solution that is general in nature.
5. Test the solution with a variety of data sets.
