Good programming style can differ based on whether one is working on a long or a short program. Often programming courses focus on teaching skills required to write very long programs, because that is where software engineering is crucial. But it is also valuable (and particularly for scientists) to be able to write clear *short* programs.

For short programs (and programs in this course)

1. Keep it short

2. Use as few functions as is clear. Any function must either provide a major functionality gain, or do something that will be obvious to any reader (e.g. defines a function with a name in Physics).

3. Avoid premature generalization.

4. Avoid data structures in favor of separate variables.

5. make code readable from top to bottom

6. make coffee vertically compact so you can read it

7. Avoid asking for user input.