

CS100: CPADS

Good Programming Practices

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Good Programming Practices

- **Develop code in small pieces**

- Always have a “**working**” program
 - Program may be incomplete, but does what is expected of it to that point
- Errors are most likely located in **most recently added code**
- Revision control
 - Keep older, working versions of program

Good Programming Practices

- **Document your code**

- Others may need to read your code
- Others may need to modify your code
- YOU may need to read your own code
- Cleanly written code is partially self-documenting

Good Programming Practices

- **Good documentation**

- Include a reasonable number of comments
 - Should describe, in English, what the code does
- Use meaningful variable names
 - **Bad variable names:**
 - **x, y, z**
 - **Better variable names:**
 - **num_sailboats, sailboat_length, sailboat_weight**
- Use proper indentation
- Use modular design (functions)
 - Divide problem into smaller, often repeated tasks
- Avoid “magic” numbers

Good Programming Practices

- **Think Before You Code!!!**

- Know what you want to do before you do anything
- Write pseudocode
- Draw flowcharts or diagrams