Conducting tests

- Start with **unit testing**
  - Check that each module (e.g. function) works correctly
- Move to **integration testing**
  - Check that system as whole works correctly
- Cycle between these phases

Test Drivers and Stubs

- **Drivers** are code that
  - Set up environment needed to run code
  - Invoke code on predefined sequence of inputs
  - Save results, and
  - Report
- Drivers simulate parts of program that use unit being tested
- **Stubs** simulate parts of program used by unit being tested
  - Allow you to test units that depend on software not yet written

Good testing practice

- Start with unit testing

- Move to integration testing

- After code is corrected, be sure to do **regression testing**:
    - Check that program still passes all the tests it used to pass, i.e., that your code fix hasn't broken something that used to work