

## Outline for January 23, 2012

Reading: §5

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1. Decision structures
  - a. If statement
  - b. Executes once, based on condition
  - c. Syntax
2. Conditions
  - a. Resolves to boolean value
  - b. Literal booleans: **True**, **False**
  - c. Testable as true or false
  - d. Relational operators
    - i. Use two arithmetic expressions to create a boolean
    - ii. `>`, `>=`, `<`, `<=`, `==`, `!=`
    - iii. Resolved after arithmetic operators
    - iv. `6 > 2`; `"UCD" == "Sac State"`
3. Two-way decisions
  - a. if-else statements
  - b. One condition, two possible code blocks
  - c. Syntax
  - d. else very powerful when the positive condition is easy to describe but not the negative
  - e. String comparison example
4. Multi-way decisions
  - a. Can execute code based on several conditions
  - b. elif (else if) introduced
  - c. Syntax
  - d. else only reached if all previous conditions false
  - e. Nested if statements