

# CIS 1068 Study Guide

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This list is by no means exhaustive

- Assignment statement
- Types
  - Primitives
    - \* Variables hold the value
    - \* Types
      - `int` and `long`
      - `float` and `double`
      - `char`
      - `boolean`
  - Objects
    - \* Collection of fields and methods.
    - \* Variables for object hold a reference to where the object is located in memory.
    - \* Can have a parent class.
- Arithmetic
- Boolean Logic
- Scanner
  - How to read from user
  - How to read from file
- If-else statements
- `for`
- `while`
- `do-while`
- Methods

- static vs instance
  - parameters
  - return types
- Arrays
- Multidimensional Array
- **try-catch**
  - Single **try** statement to prevent an **Exception** from crashing program
  - First relevant **catch** executes if **Exception** occurs
  - Optional **finally** on end.
- Objects
  - Object vs Classes
  - Instance vs static vs local variables
- Inheritance
- Polymorphism
- Recursion
  - Method calls itself to solve problem.
  - Does not result in an infinite loop as the base case will terminate the recursion.