**Program 5 Grading Criteria**

***Design (10 points)***

* (10) Class diagrams
  + Correct format; attributes show access modifier, data type, and name; methods include method name, parameters with data type, and return type.

***HouseFinderApp class (20 points)***

* (2) Displays menu correctly
* (6) Prompts user and validates input
* (2) Correctly displays all housing inventory - unsorted
* (2) Correctly displays all housing inventory - sorted
* (2) Correctly displays housing inventory - >= 4 bedrooms
* (2) Correctly displays housing inventory - <= $150k
* (2) Correctly displays lots - >= 0.25 acres
* (2) Correctly displays single listing search result

***HousingInventory class (30 points)***

* (3) Correctly creates and manages array
* (4) Correctly Sorts
* (4) Sort does not change underlying array
* (4) Correctly searches array
* (15) Returns correct arrays for getters
  + (2) all housing inventory - unsorted
  + (2) all housing inventory - sorted
  + (3) housing inventory - >= 4 bedrooms
  + (3) housing inventory - <= $150k
  + (3) lots - >= 0.25 acres
  + (2) single listing search result

***ListingFileReader, Listing, Lot, and House classes (40 points)***

* (5) ListingFileReader incorporates aggregation correctly
* (10) Listing, Lot, and House incorporates aggregation correctly
* (2) Lot acreage is correctly returned
* (10) Constructors created correctly
* (4) Instance variables declared and used correctly
* (4) Getters and setters created and used appropriately
* (3) toString methods implemented as needed
* (2) equals methods implemented as needed

***Deductions***

* Late (10% per calendar day)
* (-40) Syntax Errors
* (-30) Runtime Errors
* (-10) Style and Organization
  + Well written main comment block
  + Well written method blocks
  + Formatted code:
    - Properly spaced and indented
    - Correct use of uppercase and lowercase first letters
  + Correct use of classes/objects, methods, arguments and parameters
    - Private instance variables
  + No redundant code
* Submits .java files, not .class files
* All files zipped correctly according to directions