RECURSION PROJECT

The following rubric will be utilized in grading this project. This project will be worth **36 total points**.

Pseudocode (4 total points):

- ***2 (full credit):***
  - The pseudocode describes all steps of the program in outline format.
- ***1 (loss of 2 points):***
  - The pseudocode describes **only some** of the steps of the program.
  - Pseudocode was not ready for review by the due date.
- ***0 (no credit):***
  - **No** pseudocode submitted.

Documentation/Readability (4 total points)

- ***4 (full credit):***
  - Good use of Java style conventions
  - Header comments for all classes and methods
  - Block commenting throughout code
- ***3 (loss of 1 point):***
  - **No** use of Java style conventions
  - Header comments for all classes and methods
  - Block commenting throughout code
- ***2 (loss of 2 points):***
  - **No** use of Java style conventions
  - **No** header comments for methods
  - Header comments for all classes
  - Block commenting throughout code
- ***1 (loss of 3 points):***
  - **No** use of Java style conventions
  - **No** header comments for methods or classes
  - Block commenting throughout code
- ***0 (no credit):***
  - **No** use of Java style conventions
  - **No** header comments for methods or classes
  - **No** block commenting throughout code

User Friendliness/User Input (6 total points)

- ***3 (full credit):***
  - User prompts are easy to understand
- ***2 (loss of 2 points):***
  - **Some** user prompts are **difficult** to understand
- ***1 (loss of 4 points):***
  - **Most** user prompts are **difficult** to understand
- ***0 (no credit):***
  - ***No user input is present.***
  - ***DOES NOT COMPILE***

Encapsulation (8 total points)

- ***5 (full credit):***
  - A standalone class is present with all of the following:

        - Private instance variables
        - A constructor that initializes/instantiates all instance variables to their default value
        - Accessor and mutator methods for all instance variables
- ***4 (loss of 2 points):***
    - Instance variables in standalone class are **not** private
    - The constructor initializes/instantiates all instance variables to their default value
    - Accessor and mutator methods are present for all instance variables
- ***3 (loss of 4 points):***
    - Instance variables in standalone class are **not** private
    - The constructor **does not** initialize/instantiate all instance variables to their default value
    - Accessor and mutator methods are present for all instance variables
- ***2 (loss of 5 points):***
    - Instance variables in standalone class are **not** private
    - The constructor **does not** initialize/instantiate all instance variables to their default value
    - Accessor and mutator methods are missing for **some** instance variables
- ***1 (loss of 6 points):***
    - Instance variables in standalone class are **not** private
    - The constructor **does not** initialize/instantiate all instance variables to their default value
    - Accessor and mutator methods **do not exist** for **any** instance variables
- ***0 (no credit):***
    - No standalone class exists

Client class (3 total points)

Points will be awarded if

- a client class is created
- the client class is the only place where input and output is handled

User-Controlled Exit (2 total points)

Points will be awarded if the user is asked if they want to continue or exit the program, using an appropriate dialog box, or through the "X" button of a full GUI.

Project Requirements: (9 total points)

- ***Full credit:*** All goals for project met.
- ***Loss of 3 points:*** **Some** goals for the project **not** met.
- ***Loss of 6 points:*** **Most** goals for the project **not** met.
- ***No credit:*** **All** goals for project not met.