# CIS 15 Spring 2010 Lab II.2

1. Using `public` and `private` in a simple class.
   - Write a program that defines the class `point`. The class should contain two `private` data members `x` and `y`.
   - The class should contain `public` accessor functions to set and retrieve the values of `x` and `y`.
   - Declare two variables, `a` and `b`, of type `point`.
   - Prompt the user for the values of the members of `a`.
   - Set the `x` value of `b` to be the `y` value of `a`.
   - Set the `y` value of `b` to be a random value between 3 and 10.
   - Print the values of the members of `a` and `b` on the screen.

2. A more complex class.
   - Write a program that includes the class `point` from the previous question.
   - Now write a new class `triangle` which has 3 `private` data members, each of which is a `point` object.
   - Write public functions `print` and `set` for the class `triangle`.
     `print` should print the `x` and `y` values of the three `point` members of `triangle`.
     `set` should take 6 integers as its arguments and use these values to set the `x` and `y` values of the three points.
   - Write a `main` that creates a `triangle` object, asks the user for the `x` and `y` values for its three `point` members, and then sets those values.
   - Use the `print` member of `triangle` to print out the `x` and `y` values of the points.

3. A more complex function member.
   - Write a new function member `perimeter` for `triangle`. This should calculate the length of the three sides of the triangle and add them together.
   - Print out the value returned by `perimeter`.