## Homework 09

**Problem 1.** Modify the Firm example from this chapter such that all employees can be given different vacation options depending on their classification. Provide a method called vacation that returns the number of vacation days a person has. Give all employees a standard number of vacation days (10), then override the method in the various employee classes as appropriate. Modify the driver program to demonstrate this new functionality.

**Problem 2.** Modify the Firm project discussed in class such that it accomplishes its polymorphism using an interface called Payable, containing the pay method.

**Extra Credit (20pts)**. Modify the Firm project to also implement the Comparable interface. Staff members can be comparable based on their pay. Modify the driver program to display the firm's members in increasing order of their pay. (You may use any of the already implemented searching methods in the lecture.)