R-2.1 Give three examples of life-critical software applications.

R-2.2 Give an example of a software application in which adaptability can mean the difference between a prolonged lifetime of sales and bankruptcy.

R-2.3 Describe a component from a text-editor GUI and the methods that it encapsulates.

R-2.4 Write a Python class, Flower, that has three instance variables of type str, int, and float, that respectively represent the name of the flower, its number of petals, and its price. Your class must include a constructor method that initializes each variable to an appropriate value, and your class should include methods for setting the value of each type, and retrieving the value of each type.

R-2.5 Use the techniques of Section 1.7 to revise the charge and make payment methods of the CreditCard class to ensure that the caller sends a number as a parameter.

R-2.6 If the parameter to the make payment method of the CreditCard class were a negative number, that would have the effect of raising the balance on the account. Revise the implementation so that it raises a ValueError if a negative value is sent.

R-2.7 The CreditCard class of Section 2.3 initializes the balance of a new account to zero. Modify that class so that a new account can be given a nonzero balance using an optional fifth parameter to the constructor. The four-parameter constructor syntax should continue to produce an account with zero balance.

R-2.8 Modify the declaration of the first for loop in the CreditCard tests, from Code Fragment 2.3, so that it will eventually cause exactly one of the three credit cards to go over its credit limit. Which credit card is it?

C-2.24 Suppose you are on the design team for a new e-book reader. What are the primary classes and methods that the Python software for your reader will need? You should include an inheritance diagram for this code, but you do not need to write any actual code. Your software architecture should at least include ways for customers to buy new books, view their list of purchased books, and read their purchased books.