CSE 202 - Homework 3

Multiple Inheritance and Polymorphism : DUE : Soon

You should have the following classes developed in Laboratory 7 :

1. The class Person with attributes name, address,telephone number, E-Mail address and accessor functions to return each of these values.
2. A derived class Student which has a class status (freshman, sophomore, junior, or senior).
3. A derived class Employee which has the attributes office, salary, and date hired.
4. A class Faculty which is derived from Employee. The attributes for the Faculty class are rank (professor, associate, assistant, lecturer) and status (tenured, tenure-track, visiting, non-tenure-track).
5. A class Staff derived from Employee. Staff has a single attribute indicating the position (job title).

Complete this exercise as follows :

1. Create a new class StaffST which has Staff and Student as base classes. StaffSt has an additional attribute (int) credithours.
2. Add a *virtual* function whatami() to each class that returns the type of the class. For example, the whatami function in the Staff class would return the string "Staff".
3. Write a test main program that creates a vector of pointers to Person. Creat a Person, Student, Employee, Faculty, Staff and StaffST object and add pointers to these objects to your vector. Now process the vector to output the type of each object from the vector pointers. Confused? You can download a sample main program here.

NOTE : Please submit your code along with the script of a test run.