

**Example - the Person, Student, Employee, Faculty, and Staff classes**

Design a class named Person and its two subclasses named Student and Employee. Make Faculty and Staff subclasses of Employee.

- A person has a name
- A student has a class status: 1: freshman, 2: sophomore, 3: junior, or 4: senior.
- An employee has a date hired
- A faculty member has a rank: 1: professor, 2: associate professor, 3: assistant professor.
- A staff member has a title.

- (a) Create a Class diagram and show the relationships between the classes.
- (b) Implement the Default constructor, Parameterized constructor and Copy constructor.
- (c) Implement the overriding **toString** method in each class to display the class name, and the data fields specific to the classes.
- (d) Write a test program that creates a Person, Student, Employee, Faculty, and Staff, and invokes their toString() methods.

