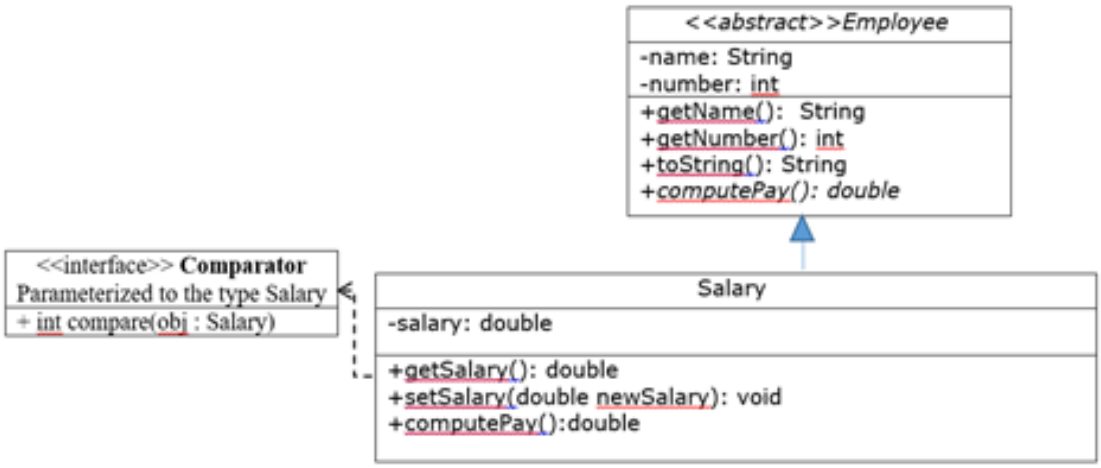
1. Create a Student class with 2 fields *Name, cgpa*. Create an arraylist of *n* students, write a code that sorts them in the order of decreasing *cgpa*. When 2 or more students have the same *cgpa*, sort those students alphabetically by name. Write a class that implements the comparable interface for comparing two students. **Note:** Two students can have the same name.

2. Consider the Employee class diagram shown below.



a. Employee Class: It is an abstract class with name and number as private member variables. The constructor of this class assigns the name and number of the employee. It has getter methods for name and number. It overrides the toString() to print the name and number of the employee object. It has an abstract method computePay().
b. Salary Class: This class inherits the Employee class and has salary as an additional private member. The constructor of this class sets the salary of an employee. The constructor sets the private members of the super class as well. The abstract method 'computePay' is overridden to compute the weekly pay of an Employee when the annual income is given as the input.
c. Test class: A linked list of salary type is created. The employee records are added to the list. An anonymous instance of type Comparator is created and it overrides the compare() method to sort employee list in descending order according to the employee's salary.

3. Write a Generic method *"sort"* that takes a generic array as an input and returns the sorted array. From the main method pass an Integer array, String array and Double array to test the generic method.