Practice 1：*Employees Salary*

A company pays its employees monthly. The employees are of three types:

- ✓ Salaried employees are paid a fixed monthly salary,
- ✓ Commission employees are paid a percentage of their sales, and
- ✓ Base-salary-plus-commission employees receive a base salary plus a percentage of their sales.

For the current pay period, the company has decided to reward base-salary-plus-commission employees by adding 10 percent to their base salaries. Please implement a Java console application that performs its payroll calculations **polymorphically**.

Please use **abstract class** Employee to represent the general concept of an employee. The classes that derive directly from Employee are SalariedEmployee and CommissionEmployee. Class BasePlusCommissionEmployee—derived from CommissionEmployee—represents the last employee type.

Abstract base class Employee declares the "interface" to the hierarchy—that is, the set of member functions that a program can invoke on all Employee objects.

Each employee, regardless of the way his or her earnings are calculated, has a first name, a last name and a social security number, so private data members firstName, lastName and socialSecurityNumber appear in abstract base class Employee.

Practice 2：*Comparable Interface*

Write a Java program ScoreSorter.java to sort the score rank in the class using ***Array.sort*.**

There are three data fields in Score class.

They are Chinese score, English score, and Mathematics score respectively.

The rank priority is by total score, by Chinese score, by English score, and by mathematics score.

Please implement the **Comparable interface** to handle this sorting problem.

```
Total : 280 Chinese : 100 English : 90  Math : 90
Total : 260 Chinese : 90  English : 80  Math : 90
Total : 260 Chinese : 70  English : 90  Math : 100
Total : 210 Chinese : 100 English : 30  Math : 80
Total : 210 Chinese : 70  English : 60  Math : 80
Total : 210 Chinese : 50  English : 80  Math : 80
Total : 200 Chinese : 80  English : 100 Math : 20
Total : 200 Chinese : 80  English : 80  Math : 40
Total : 180 Chinese : 70  English : 70  Math : 40
Total : 170 Chinese : 80  English : 40  Math : 50
```