**public** **interface** Person {

**double** calculateBonus();

String getName();

}

**public** **abstract** **class** Employee **implements** Person {

**private** String name;

**private** **int** id;

**public** Employee(String name, **int** id) {

**this**.name = name;

**this**.id = id;

}

**public** Employee(Employee e) {

name = e.name;

id = e.id;

}

**public** String getName() {

**return** name;

}

}

**public** **class** Manager **extends** Employee {

**private** **int** nbProjects;

**public** Manager(String name, **int** id, **int** nbProjects) {

**super**(name, id);

**this**.nbProjects = nbProjects;

}

**public** Manager(Manager m) {

**super**(m);

nbProjects = m.nbProjects;

}

**public** **double** calculateBonus() {

**return** nbProjects \* 10000;

}

**public** **int** getNbProjects() {

**return** nbProjects;

}

}

**public** **class** SalariedEmployee **extends** Employee {

**private** **double** salary;

**public** SalariedEmployee(String name, **int** id, **double** salary) {

**super**(name, id);

**this**.salary = salary;

}

**public** SalariedEmployee(SalariedEmployee s) {

**super**(s);

}

**public** **double** calculateBonus() {

**return** salary \* 2;

}

}

**public** **class** Company {

**private** String name;

**private** Person arp[];

**private** **int** nb;

Company(String name) {

**this**.name = name;

arp = **new** Person[200];

nb = 0;

}

**public** **void** addPrson(Person p) {

**if** (nb >= arp.length)

**return**;

**if** (p **instanceof** Manager)

arp[nb] = **new** Manager((Manager) p);

**else**

arp[nb] = **new** SalariedEmployee((SalariedEmployee) p);

nb++;

}

**public** **int** countSalariedEmployee(**double** s) {

**int** count = 0;

**for** (**int** i = 0; i < nb; i++)

**if** (arp[i] **instanceof** SalariedEmployee)

**if** (arp[i].calculateBonus() >= s)

count++;

**return** count;

}

**public** Manager[] getManagers(**int** n) {

Manager[] m = **new** Manager[nb];

**int** j = 0;

**for** (**int** i = 0; i < nb; i++) {

**if** (arp[i] **instanceof** Manager) {

Manager x = (Manager) arp[i];

**if** (x.getNbProjects() > n) {

m[j] = x;

j++;

}

}

}

**return** m;

}

}