**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;

 }

}