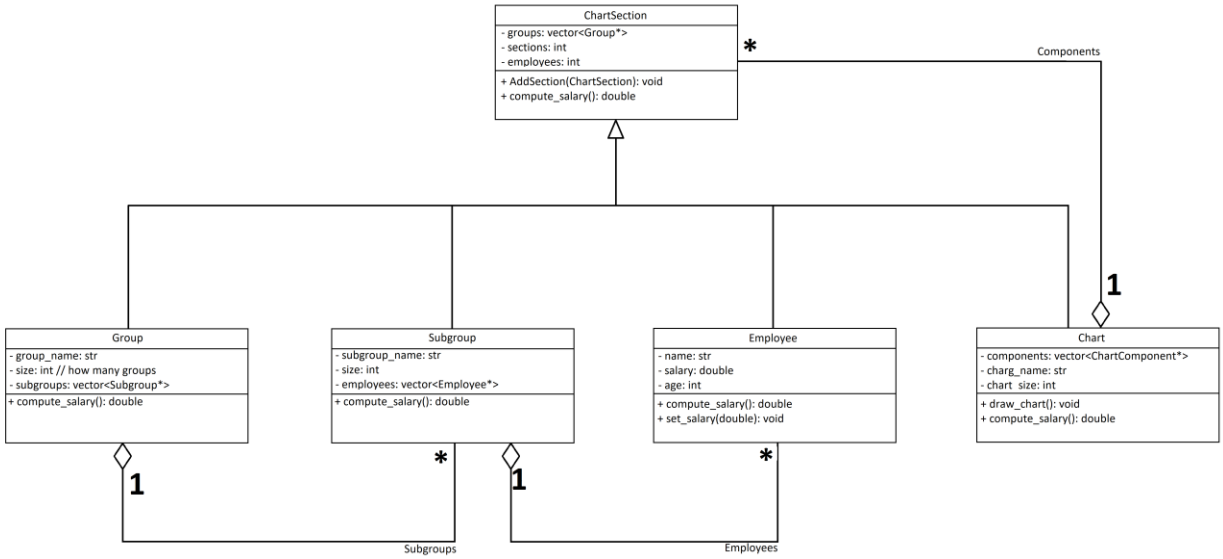
ICE #5

1)



2)

// chart.h

```
#ifndef CHART_H
#define CHART_H

#include <iostream>
#include <vector>

using namespace std;

class ChartSection {

    private:
        vector<Group*> groups;
        int sections;
        int employees;

    public:
        void AddSection(ChartSection);
        double compute_salary() const;
};

class Employee : public ChartSection {

    private:
        string name;
        double salary;
        int age;

    public:
        double compute_salary() const;
        void set_salary(double);
};

class Subgroup : public ChartSection {

    private:
        string subground_name;
        int size;
        vector<Employee*> employees;

    public:
        double compute_salary() const;
};

class Group : public ChartSection {

    private:
        string group_name;
        int size;
        vector<Subgroup*> subgroups;

    public:
        double compute_salary() const;
};

#endif /* CHART_H */
```

// implementation.cpp

```cpp
#include "chart.h"

using namepsace std;

double ChartSection::compute_salary() const {

    double total = 0.0;
    for (int i = 0; i < this->groups.size(); i++) {

        total += this->groups.at(i).compute_salary();
    }

    return total;
}

double Employee::compute_salary() const {

    return this->salary();
}

double Subgroup::compute_salary() const {

    double total = 0.0;
    for (int i = 0; i < this->employees.size() i++) {

        total += this->employees.at(i).compute_salary();
    }

    return total;
}

double Group::compute_salary() const {

    double total = 0.0;
    for (int i = 0; i < this->subgroups.size(); i++) {

        total += this->subgroups.at(i).compute_salary();
    }

    return total;
}
```