//案例

//五个选手，10个评委分别对每一个选手打分，去除最高，最低分，取平均数

#include<iostream>

using namespace std;

#include<string>

#include<deque>

#include<vector>

#include<algorithm>

#include<ctime>

class person {

public:

person(string name, int score) {

this->mname = name;

this->mscore = score;

}

string mname;

int mscore;

};

void createp(vector<person>& v) {

string nameseed = "ABCDE";

for (int i = 0; i < 5; i++) {

string name = "选手";

name += nameseed[i];

int score = 0;

person p(name, score);

//将创建的person对象放进容器中

v.push\_back(p);

}

}

void setscore(vector<person>& v) {

for(vector<person>::iterator it=v.begin();it!=v.end();it++){

//将评委的分数放入deque容器中

deque<int>d;

for (int i = 0; i < 10; i++) {

int score = rand() % 41 + 60;//60-100

d.push\_back(score);

}

//显示得分

/\*cout << "选手：" << it->mname << "打分" << endl;

for (deque<int>::iterator dit = d.begin(); dit != d.end(); dit++) {

cout << \*dit << " ";

}

cout << endl;\*/

//排序

sort(d.begin(), d.end());

//去除最高，最低分

d.pop\_back();

d.pop\_front();

//取平均分

int sum = 0;

for (deque<int>::iterator dit = d.begin(); dit != d.end(); dit++) {

sum += \*dit;//累加

}

int avg = sum / d.size();

//将平均分赋值选手

it->mscore = avg;

}

}

void show(vector<person>&v) {

for (vector<person>::iterator it = v.begin(); it != v.end(); it++) {

cout << "name:" << it->mname << "score:" << it->mscore << endl;

}

}

int main() {

//随机数的种子

srand((unsigned int)time(NULL));

//1.创建五个选手

vector<person>v;

createp(v);

//测试

// for (vector<person>::iterator it = v.begin(); it != v.end(); it++) {

// cout << "name=" << (\*it).mname << "分数" << (\*it).mscore << endl;

//}

//2.打分

setscore(v);

//3.显示得分

show(v);

system("pause");

return 0;

}