class Student{

public:

virtual bool getGender() = 0;

double getRunGrade(){return runGrade;}

double getWalkGrade(){return walkGrade;}

private:

double runGrade;

double walkGrade;

};

class Boy:pulic Student{

public:

bool getGender(){

return true;

}

};

class Girl:pulic Student{

public:

bool getGender(){

return false

}

}

double getGrade(Student s){

if(s.getGender() == true)

return s.getRunGrade();

else

return s.getWalkGrade();

}

template<T, U>

U\* map(T[] t, U func(T t), int length = 10){

U\* res = new U[length];

for(int i = 0; i < length; i++)

res[i] = func(t[i]);

return res;

}

//调用方式

Student S[...];

double \* res = map<Student, double>(S, getGrade, 10);