#include <iostream>

#include<unordered\_map>

#include<cstring>

using namespace std;

class Student{

public:

string firstname;

string lastname;

string rollno;

Student(string f,string l,string no){

firstname=f;

lastname=l;

rollno=no;

}

bool operator == (const Student &s) const{

return rollno == s.rollno?true:false;

}

};

class HashFn{

public:

size\_t operator()(const Student &s) const{

return s.firstname.length() + s.lastname.length();

}

};

int main() {

unordered\_map<Student,int,HashFn> student\_map;

Student s1("Vishal","Yadav","29");

Student s2("Yatharth","Katyal","31");

Student s3("Deepanshu","Yadav","01");

Student s4("Vishal","Yadav","29");

Student s5("Deepanshu","Singh","9");

//Add student - marks to hash map

student\_map[s1]=100;

student\_map[s2]=120;

student\_map[s3]=11;

student\_map[s4]=25;

student\_map[s5]=90;

//find the marks of student s3

cout<<student\_map[s3]<<endl;

//iterate over all students

for(auto s:student\_map){

cout<<s.first.firstname<<" "<<s.first.rollno<<endl<<" Marks "<<s.second<<endl;

}

return 0;

}

Output-

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Vishal 29

Marks 25

Deepanshu 9

Marks 90

Deepanshu 01

Marks 11

Yatharth 31

Marks 120