#include <iostream>

#include <string>

using namespace std;

// Base class: Person

class Person {

protected:

string name;

string contact;

public:

Person(string n, string c) {

name = n;

contact = c;

}

void display() {

cout << "Name: " << name << endl;

cout << "Contact: " << contact << endl;

}

};

// Derived class: Patient

class Patient : public Person {

private:

string disease;

public:

Patient(string n, string c, string d) : Person(n, c) {

disease = d;

}

void displayPatient() {

display();

cout << "Disease: " << disease << endl;

}

};

// Derived class: Doctor

class Doctor : public Person {

private:

string specialization;

public:

Doctor(string n, string c, string s) : Person(n, c) {

specialization = s;

}

void displayDoctor() {

display();

cout << "Specialization: " << specialization << endl;

}

};

int main() {

// Create objects

Patient p("Sam", "1234567890", "Fever");

Doctor d("Smith", "9876543210", "Cardiologist");

// Display patient and doctor information

cout << "Patient Information:" << endl;

p.displayPatient();

cout << endl;

cout << "Doctor Information:" << endl;

d.displayDoctor();

return 0;

}

**Output:**

Patient Information:

Name: Sam

Contact: 1234567890

Disease: Fever

Doctor Information:

Name: Smith

Contact: 9876543210

Specialization: Cardiologist