```cpp
//IT21380914
//K.M.S.P. Jayawardena
//MLB_10.02_14


#include<iostream>
#include <iomanip>
#include <string>
#define SIZE 2
using namespace std;



//Guest class

class Guest
{
protected:

        string FirstName;
        string LastName;
        string NIC;
        string DOB;
        int Age;
        string Address;
        int ContactNum;
        string Email;


public:

        Guest();
        Guest(string fname, string lname, string cNIC, string cDOB, int age, string
C_address, int contact, string email);

        //setters
        void setFirstName(string fname);
        void setLastName(string lname);
        void setNIC(string cNIC);
        void setDOB(string cDOB);
        void setAge(int age);
        void setAddress(string C_address);
        void setContactNumber(int contact);
        void setEmail(string email);

        //getters
        string getFirstName();
        string getLastName();
        string getNIC();
        string getDOB();
        int  getAge();
        string getAddress();
        int  getContactNumber();
        string getEmail();

        void viewInsuranceDetails();
        void RegsiterToSystem();
        void DisplayGuestDetails(); };
```

```cpp
//Registered member.

class Registered_member : public Guest     //Multi-level inheritance.
{
protected:
        Feedback* f_back[SIZE];
        Login* log_in[1]; //compostion

public:
        Registered_member();
        Registered_member(string fname, string lname, string cNIC, string cDOB, int
age, string C_address, int contact, string email);
        //Compostion
        void addLogin();

        // composition
        void addFeedback(Feedback *f1, Feedback *f2);

        void login();
        void updateAccounr();
        void giveFeedback();
        void RegsiterToPolicy();
        void DisplayMemberDetails();

};



//Doctor.

class Doctor : public Registered_member    //Multi-level inheritance.
{
protected:
        string id;
        Report* rept[SIZE];

public:
        Doctor();
        Doctor(string fname, string lname, string cNIC, string cDOB, int age, string
C_address, int contact, string email, string d_id);

        void setDoctorID(const char d_id[]);
        string getDoctorID();
        void AccessReports();
        void ValidateReports();
        void UploadValidatedReports();
        void DisplayDoctorDetails();
};
```

```cpp
//Implementig the constructors
Guest::Guest()
{
      FirstName = "";
      LastName = "";
      NIC = "";
      DOB = "";
      Age = 0;
      Address = "";
      ContactNum = 0;
      Email = "";
}
Guest::Guest(string fname, string lname, string cNIC, string cDOB, int age, string
C_address, int contact, string email)
{
      FirstName = fname;
      LastName = lname;
      NIC = cNIC;
      DOB = cDOB;
      Age = age;
      Address = C_address;
      ContactNum = contact;
      Email = email;

}


void Guest::DisplayGuestDetails()
{
      cout << "Guest first name:" << FirstName << endl;
      cout << "Guest Last name:" << LastName << endl;
      cout << "Guest NIC:" << NIC << endl;
      cout << "Guest DOB:" << DOB << endl;
      cout << "Guest age:" << Age << endl;
      cout << "Guest Address:" << Address << endl;
      cout << "Guest contact number:" << ContactNum << endl;
      cout << "*********************" << endl;
}


Registered_member::Registered_member()
{
      FirstName = "";
      LastName = "";
      NIC = "";
      DOB = "";
      Age = 0;
      Address = "";
      ContactNum = 0;
      Email = "";

}

Registered_member::Registered_member(string fname, string lname, string cNIC, string
cDOB, int age, string C_address, int contact, string email)
{
      FirstName = fname;
      LastName = lname;
```

```cpp
        NIC = cNIC;
        DOB = cDOB;
        Age = age;
        Address = C_address;
        ContactNum = contact;
        Email = email;
}
void Registered_member::addLogin()
{

}


void Registered_member::addFeedback(Feedback *f1, Feedback *f2)
{
        f_back[0] = f1;
        f_back[1] = f2;
}

void Registered_member::DisplayMemberDetails()
{
        cout << "Registered member first name:" << FirstName << endl;
        cout << "Registered member Last name:" << LastName << endl;
        cout << "Registered member NIC:" << NIC << endl;
        cout << "Registered member DOB:" << DOB << endl;
        cout << "Registered member age:" << Age << endl;
        cout << "Registered member address" << Address << endl;
        cout << "Registered member Contact Number:" << ContactNum << endl;
        cout << "*********************" << endl;
}


Doctor::Doctor()
{
        FirstName = "";
        LastName = "";
        NIC = "";
        DOB = "";
        Age = 0;
        Address = "";
        ContactNum = 0;
        Email = "";
        id = "";
}
Doctor::Doctor(string fname, string lname, string cNIC, string cDOB, int age, string
C_address, int contact, string email, string d_id)
{
        FirstName = fname;
        LastName = lname;
        NIC = cNIC;
        DOB = cDOB;
        Age = age;
        Address = C_address;
        ContactNum = contact;
        Email = email;
        id = d_id;
}
```

```cpp
void Doctor::DisplayDoctorDetails()
{
        cout << "Doctor first name:" << FirstName << endl;
        cout << "Doctor Last name:" << LastName << endl;
        cout << "Docotr NIC:" << NIC << endl;
        cout << "Doctor DOB:" << DOB << endl;
        cout << "Doctor age" << Age << endl;
        cout << "Doctor address:" << Address << endl;
        cout << "Doctor contact Number:" << ContactNum << endl;
        cout << "Docotr ID:" << id << endl;
        cout << "*********************" << endl;

}

int main()
{
        Guest g1;
        g1.DisplayGuestDetails();

        Registered_member r1;
        r1.DisplayMemberDetails();

        Doctor d1;
        d1.DisplayDoctorDetails();
}
```