ЗАДАНИЕ К ЛЕКЦИИ **COMPOSITION**

Create a date class and Person Class.   Compose the date class in the person class.

STEP 1a - *Define* date class
   First, code the definition of a **_date_** class.

   Which has private integer month, integer day and integer year
      Write public function getters and setters: getMonth.. setMonth.. getDay.. setDay...
getYear...setYear...

   Be sure that you validate the setter function inputs:
    2 digit months - validate 1-12 for month
    2 digit day - 1-3? max for day - be sure the min-max number of days is validate for
specific month
      Use 4 digits for the year... - validate greater or equal to 1900
      * Set the value to 1/1/1900 if it out of range..

    4 digit year - validate for date >= 1900

   Have a *default constructor* which set values of month, day and year... to 01 01
1900 (Used in step 2)
   Have a *parameterized constructor* which lets you set date (Used in step 3)

STEP 1b - *Define* Person class and compose date class in it !

* Next, code the definition of a **_person_** class

   Which has private string firstname, and string lastname (private members)
   Which as a Date of birth (using new **_date_** class YOU declared - place declaration as
private member in person)

   Write public getter and setters for firstname and last name (public members)
   Write public getter and setters for month, day and year for private data declaration.

      Critical Note: these function in the person function.. call the public function in the
Date class !!!!!!! (public members).

      How to call a function in the DATE class you declared a few line above ? What is the
instance name of the date class ?

            instanceName.getDay()...

            intanceName.getYear()...

            instanceName.getMongh()...

   Write a **_person default constructor_** function that defaults "None" "None" for firstname
and lastname (public members),

and 01, 01, 1900 for the MM, DD, YYYY..   Values assigned in the constructor function..

Write a *person parmaterized constructor* function that can pass data to firstname and lastname, and
the composed birthdate. (public members)

STEP 2 - *Declare* - In the int Main function

 * Code and test a person class

Declare a *person Person1;* using the default constructor, to test it. 1/1/1900 date default, "Not Entered" for first and last name.

Using getters and setters of the person class to test fully.

Declare a *person Person2(01, 21, 2001, "Jena", "Neuclue");* using the parameterized constructor, to test it.

Step 3 - *Using* getters and setters of the person class to test fully.

// Print default constructor person...values defaulted

cout << "Person 1 - First name: " << Person1.getFirstName() << endl;

cout << "Person 1 - Last name: " << Person1.getLastName() << endl;

cout << "Person 1 - Birth Date: " << Person1.getMonth() << " / " << Person1.getDay() << " / " << Person1.getYear() << endl;

 // Change default constructor person values

Person1.setFirstName(" Your Name ");

Person1.setLastName(" Your last Name");

Person1.setMonth(01);

Person1.setDay(42);

Person1.setYear(2001);

// Print out new values for the Default constructor person

cout << "Person 1 - First name: " << Person1.getFirstName() << endl;

cout << "Person 1 - Last name: " << Person1.getFirstName() << endl;

cout << "Person 1 - Birth Date: " << Person1.getMonth() << " / " << Person1.getDay() << " / " << Person1.getYear() << endl;

```cpp
    // Print out values in parameterize person2
        cout << "Person 2 - First name: " << Person2.getFirstName() << endl;

        cout << "Person 2 - Last name: " << Person2.getFirstName() << endl;

        cout << "Person 2 - Birth Date: " << Person2.getMonth() << " / " << Person2.getDay()
    << " / " << Person2.getYear() << endl;
```
  * Include Class Composition UML diagrams

   Note: complete need parts to the program