Exercise: Phonebook

Write a program that allows you to manage a phone book. The class "Contact" allows you to represent each person that will be part of the list. The program must use Java Collections to manage the contacts.

Each contact must contain the following attributes:

- Unique identifier (int) - must be automatic, incremental
- Name of the person (String)
- Cell phone (int)
- E-mail (String)
- Date of birth (LocalDate)

The program must contain at least the following classes:

- Contact is the class that represents the contacts in the list. This class must have the attributes mentioned above, a constructor, toString function and the appropriate setters and getters, hashCode, equals.
- ContactManager is the class responsible for managing the contact list. It must implement the interface ContactManagerInterface.
- Main, which will contain a menu for managing the phonebook. This class should provide a menu that allows you to:
  - Add contact
  - Modify contact
  - Delete contact
  - Search contact by name
  - Search by cell phone
  - E-mail Search
  - List contacts
  - List contacts sorted by name
  - List contacts sorted by phone number
  - List contacts sorted by e-mail
  - List contacts sorted by date of birth
  - Close

You should also consider the following requirements:

- The program should read the "contacts.txt" file and start the phonebook with the data saved there. In the end, when the user exits the program ("Close" option), the program must write the current contents of the list to the same file, respecting the original format.
- It should not be possible to add a contact that already exists. To check if the two contacts are the same, consider the name, cell phone and e-mail.
- You must validate the e-mail (using a simple regular expression) and the phone contact (it must have 9 digits).