

Author

Create a class named Author with the following private member variables.

- name of type String
- email of type String
- gender of type String

The class Author implements Comparable interface.

Include appropriate getters and setters.

Include appropriate constructors.

Override the toString () method defined in the Object class to display the author details in the given format:

Ex:

name (gender) contact at email

A (Male) contact at A@gmail.com

Override the compareTo() method defined in the Comparable interface to compare 2 Author objects based on author name.

Create another class named AuthorBO. There are no member variables in this class.

Include the following public methods in this class

Method prototype	Method description
public void displayAllAuthorDetails (List<Author> authorList)	Display the details of all authors in the specified format using the code snippet given below.
public void listAuthorNamesInSortedOrder (List<Author> authorList)	Prints the line as shown in the output and displays the names of authors sorted lexicographically.
public Author findAuthorByName (List<Author> authorList, String name)	Returns the author object where the author name is 'name'. If no such object is found, this method returns null.

Use the following code snippet to format the display of authors.

```
System.out.format("%-20s %-20s %-20s\n", "Name","Email","Gender");
```

Create another class and write a main method to test the above classes.

Input and Output Format:

Refer sample input and output for formatting specifications.

All text in bold corresponds to input and the rest corresponds to output.

Sample Input and Output 1:

Enter the author name

Chetan Bhagat

Enter the author email id

chetan.bhagat@gmail.com

Enter the author's gender

Male

Do you want to add the details of another author? Type Yes/No (Not case sensitive)

yes

Enter the author name

Arundati Roy

Enter the author email id

a.roy@gmail.com

Enter the author's gender

Female

Do you want to add the details of another author? Type Yes/No (Not case sensitive)

no

Name Email Gender

Chetan Bhagat chetan.bhagat@gmail.com Male

Arundati Roy a.roy@gmail.com Female

Enter the name of the author to be searched

Arundati

Author not found

Alphabetically sorted author names

Arundati Roy

Chetan Bhagat

Sample Input and Output 2:

Enter the author name

Chetan Bhagat

Enter the author email id

chetan.bhagat@gmail.com

Enter the author's gender

Male

Do you want to add the details of another author? Type Yes/No (Not case sensitive)

yes

Enter the author name

Arundati Roy

Enter the author email id

a.roy@gmail.com

Enter the author's gender

Female

Do you want to add the details of another author? Type Yes/No (Not case sensitive)

no

Name Email Gender

Chetan Bhagat chetan.bhagat@gmail.com Male

Arundati Roy a.roy@gmail.com Female

Enter the name of the author to be searched

Arundati Roy

Arundati Roy (Female) contact at a.roy@gmail.com

Alphabetically sorted author names

Arundati Roy
Chetan Bhagat

Object Oriented Requirements:

```
Author {  
}  
AuthorBO {  
}
```