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**Customer & Hashmaps**

Create a class named as **Customer**, which contains following private variables/ attributes,

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Member Field name** | **Type** | | id | Long | | name | String | | gender | Character (M/F) | | email | String | | contactNumber | String | | createdOn | Date (time in 24 hrs clock) dd/MM/yyyy HH:mm:ss | | address | Address | |

Mark all the attributes as private

Create / Generate appropriate Getters & Setters.

Add a default constructor and a parameterized constructor to take in all attributes.

|  |  |  |
| --- | --- | --- |
| **No** | **Method Name** | **Method Description** |
| 1 | public static HashMap<String, Integer> convertCsvToMap(List<String> csvDetails) | This method returns a Hashmap <String state, Integer count>. The key would be the state name and count would be the number of customers in the particular state |
| 2 | public static List<Customer> getCustomerListFromMap(Map<String, Integer> customerMap) | This method returns the customer list, which is sorted (Ascending) based on both state and name. State – sorted based on string ascending order. Customer – sorted based on name ascending order. |

Create a class named as **Address**, which contains following private variable/ attributes,

|  |  |
| --- | --- |
| **Member Field name** | **Type** |
| street | String |
| city | String |
| state | String |
| country | String |
| zipCode | Integer |

Include appropriate getters and setters.  
Add a default constructor and a parameterized constructor to take in all attributes.

**Hint:** You can get all the keys from hashmap and create a sorted list.

State – sorted based on string ascending order.

Customer – sorted based on name ascending order.  
  
Please add the address data member from the template code.  
Also for the second function, Use the arraylist as a static variable or additional attribute.  
  
  
**Input Format:**  
  
The first input consists of an integer that corresponds to the number of customers n.  
The next n input consists of a string that corresponds to the customer details, which is separated by the comma (,).  
Input sequence - id,name,email,state,country.  
  
**Output Format:**  
  
The first list format is,  
**"%-15s %s\n","State","No of customer(s)"**  
  
Second list:  
The Format for the output is,  
**"%-5s %-15s %-5s %-20s %-20s %-15s %-15s %-15s %s\n", "Id", "Name", "Gender", "Email",  "Created on", "City", "State", "Country", "Zipcode"**  
  
**Sample Input and Output:**

Enter the number of customer:

**10**

Enter the customer 1 details:

**1,John Smith,M,johnsmith@a.com,+89-7485-8578974885,15/01/2016 10:30:00,112th St,Utica,New York,USA,13455**

Enter the customer 2 details:

**2,Aekerman,M,aekerman@a.com,+99-7489-8857945569,14/02/2016 16:30:00,Avenue,Austin,Texas,USA,88596**

Enter the customer 3 details:

**3,Madeleine,F,madeleine@a.com,+88-7859-7748599989,25/01/2016 10:00:00,155th St,Plano,Texas,USA,56684**

Enter the customer 4 details:

**4,Edrick,M,edrick@a.com,+99-7482-4115233987,18/12/2016 07:30:00,111th St,Sitka,Alaska,USA,66584**

Enter the customer 5 details:

**5,Tedmond,M,tedmond@a.com,+77-8599-4225610074,05/01/2016 08:30:00,Parc St,Olympia,Washington,USA,85574**

Enter the customer 6 details:

**6,Nelson,M,nelson@a.com,+78-7488-4221258447,02/01/2017 10:30:00,5th St,Dayton,Ohio,USA,84587**

Enter the customer 7 details:

**7,Dalton,M,dalton@a.com,+78-8547-8555479512,15/01/2017 20:30:00,North St,Buffallo,New York,USA,25664**

Enter the customer 8 details:

**8,Raymond,M,raymond@a.com,+89-7484-8577458895,25/02/2017 10:30:00,15th St,Waco,Texas,USA,7858**

Enter the customer 9 details:

**9,Rosemary,F,rosemary@a.com,+88-4888-7485998741,20/02/2017 12:30:00,15th St,Tacoma,Washington,USA,87458**

Enter the customer 10 details:

**10,Ruford,M,ruford@a.com,+84-422-9887485995,22/03/2017 9:30:00,9th St,Butte,Montana,USA,22458**

|  |  |
| --- | --- |
| State | No of customer(s) |
| Alaska | 1 |
| Montana | 1 |
| New York | 2 |
| Ohio | 1 |
| Texas | 3 |
| Washington | 2 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Id | Name | Gender | Email | Created on | City | State | Country | Zipcode |
| 4 | Edrick | M | edrick@a.com | 18/12/2016 07:30:00 | Sitka | Alaska | USA | 66584 |
| 10 | Ruford | M | ruford@a.com | 22/03/2017 09:30:00 | Butte | Montana | USA | 22458 |
| 7 | Dalton | M | dalton@a.com | 15/01/2017 20:30:00 | Buffallo | New York | USA | 25664 |
| 1 | John Smith | M | johnsmith@a.com | 15/01/2016 10:30:00 | Utica | New York | USA | 13455 |
| 6 | Nelson | M | nelson@a.com | 02/01/2017 10:30:00 | Dayton | Ohio | USA | 84587 |
| 2 | Aekerman | M | aekerman@a.com | 14/02/2016 16:30:00 | Austin | Texas | USA | 88596 |
| 3 | Madeleine | F | madeleine@a.com | 25/01/2016 10:00:00 | Plano | Texas | USA | 56684 |
| 8 | Raymond | M | raymond@a.com | 25/02/2017 10:30:00 | Waco | Texas | USA | 7858 |
| 9 | Rosemary | F | rosemary@a.com | 20/02/2017 12:30:00 | Tacoma | Washington | USA | 87458 |
| 5 | Tedmond | M | tedmond@a.com | 05/01/2016 08:30:00 | Olympia | Washington | USA | 85574 |