1) Given a TreeMap<Long, Contact> which has phone numbers for keys and contact objects for values.

   Write solutions to

   a. Fetch all the keys and print them,
   b. Fetch all the values and print them
   c. Print all key-value pairs

   Note:

   a) Contacts should be stored in descending order of phone number
   b) Contact Class:
      - PhoneNumer: <long>
      - Name: <String>
      - Email: <String>
      - Gender: <Enum>

2) Write an application to store 10 unique product objects. In case there is an attempt to add a duplicate product, it should be silently rejected. Hint: **Use** HasSet or TreeSet

   Extra(optional): Use ArrayList in the above solution. (This is optional)

3) Store at least 10 Employee Objects in an TreeSet<Employee>. When the application runs the user should be asked to select one of the options upon which you will print the employee details in a sorted manner.

   For E.g.

   Run Application:

   a) ID
   b) Name
   c) Department
   d) Salary

   Your choice: b

   <Should print all the employee's details sorted by name>

4) Given a LinkedList of Objects representing date of birth's (use any inbuild java class to represent date), print the date's along with the message: Your date of Birth is DD-MM-YYYY, and it (was or was not) a leap year.

E.g.

a) For the date 23-12-2000

Your date of birth is 23-12-2000 and it **was** a leap year

c) For the date 23-12-2001

Your date of birth is 23-12-2000 and it **was not** a leap year

Note: You need to access the Dates in the reverse order. I.e. start from the last object and move towards the first object