CS23304 –Java Programming Laboratory – N batch

Files and Serialization - preparatory

Exercise-VII

Date: 10.9.25   marks: 15 marks

1. Write a program that will record the maximum marks of a question paper. For each question, read from the keyboard a question number, its subparts, and the marks allotted to each part. Compute the marks of each question (subparts times marks allotted) and write all this data to a text file. Also, display this information and the maximum marks of the total questions on the screen. After all questions have been entered, write the maximum marks to both the screen and the file. Since we want to remember all the questions entered, you should append new data to the end of the file.

2. Write a class TelephoneNumber that will hold a telephone number. An object of this class will have the attributes
   • areaCode—a three-digit integer
   • exchangeCode—a three-digit integer
   • number—a four-digit integer

   the get and set methods and

   • TelephoneNumber(aString)—a constructor that creates and returns anew instance of its class, given a string in the form xxx–xxx–xxxx or, if the area code is missing, xxx–xxxx.

   • toString—returns a string in either of the two formats shown previously for the constructor.

   Using a text editor, create a text file of several telephone numbers, using the two formats described previously.
   Write a program to do the following
   i.   reads this file, displays the data on the screen, and creates an array/arraylist whose base type is TelephoneNumber.
   ii.   Search for the given phone number if it exists return true, else false