Faculty of Engineering, University of Jaffna
Department of Computer Engineering
EC5080: Software Construction
Lab - 05: Input/Output, Error Handling and Parsing Textual Formats

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Date: 02nd June 2021   **Duration: 3 Hours**

Write a command line app which takes input from the command window. This application is related to a phone contact list. The first input is always the name of a ".txt" file used to store the phone records. You have given a sample file named **conatact_list.txt**.

Implement the following features according to the following inputs given to the command line

i)   If the input followed by the file name is a name (A name can contain more than one word), it should find the corresponding mobile number(s). There can be more than one person with the same name as shown below. In case of multiple persons with given input name, the name of the person and their number should be printed.

Example:

Input:

C/Downloads/contact_list.txt Mary Anne

Output*:

Mary Anne	808-779-1466
Mary Anne David	843-798-6698
Mary Anne Doe	801-557-2819

Note that the output should be formatted such that numbers appear in the same column.

ii) If the input followed by the file name is a number, the corresponding name should be printed out. If multiple names are found, an exception (StoredDataDuplicateNumberException) should be thrown. (Assume the correct input for a number contains only digits and no symbols, although the output and stored values does.)

iii) If the following inputs is a name followed by a number, it should be added to the contacts list in the alphabetical order of names. If the contacts list does not exit, the text file and necessary directories should be created. Note that irrespective of the input, the first letter of each name should be capitalized and the rest should be in lower case. Duplicate numbers should not be added.

Instructions:
- Create a zip file named L5_2018_E_xxx which contains Java program.
- Upload the zip file on/before given deadline via teams.
- Any plagiarized work will be given 0 marks.