**UNIVERSITY OF CENTRAL PUNJAB, LAHORE**

**Mid Term Spring 2022**

**Course Title:** Programming Fundamentals - Lab                           **Time:** 90 minutes

**Program Name:** BS(CS) **Semester:** Spring 2022

**Follow the below given instructions**

* There are total 2 questions and each question carries 20 marks.
* Given example is one of the sample inputs/outputs, your program should work on different inputs as well.
* Complete your exam in given time.
* Submit one zip folder on portal having only .cpp files
* Plagiarism will never be tolerated in any case.

**Question 1:**

Write a function based program that separates all the data from one file to multiple files. The given file “**Users.txt**” contains the data of multiple users which contains id, name, number and email. You have to write ids of all the users in file “**ids.txt**”, all the names of users in “**names.txt**”, all the numbers of users in “**numbers.txt**”, and all the emails of users in “**emails.txt**” files.

The format of the file is given below:

|  |
| --- |
| User.txt |
| Id: 123 name: Ali Ahmad number: 03211234567 email: [ali.ahmad@ucp.edu.pk](mailto:ali.ahmad@ucp.edu.pk)   Id: 456 name: Hamid Subhan number: 03337654321 email: [h.subhan@ucp.edu.pk](mailto:h.subhan@ucp.edu.pk)  Id: 789 name: Sara Ibrahim number: 03014567890 email: [s.ibrahim@ucp.edu.pk](mailto:s.ibrahim@ucp.edu.pk) |

The output files should be:

|  |  |  |  |
| --- | --- | --- | --- |
| Ids.txt | Names.txt | Numbers.txt | Emails.txt |
| 123  456  789 | Ali Ahmad  Hamid Subhan  Sara Ibrahim | 03211234567  03337654321  03014567890 | [ali.ahmad@ucp.edu.pk](mailto:ali.ahmad@ucp.edu.pk)  [h.subhan@ucp.edu.pk](mailto:h.subhan@ucp.edu.pk)  [s.ibrahim@ucp.edu.pk](mailto:s.ibrahim@ucp.edu.pk) |

**Question 2:**

You have to create an application **spell checker** based on your programming fundamentals expertise. You have to read data from file **input.txt** and check if all the words in file are spelled correctly.

Write a function based program that finds all the misspelled words in a given text file **“input.txt”**. The misspelled words are found by checking against a file **“dictionary.txt”** which contains all possible correct words. Print all the misspelled words on the console screen.

**Example:**

|  |  |
| --- | --- |
| **Input.txt** | **Dictionary.txt** |
| the name of my country is pakistan It is an Islamic coutry its nationel languge is urdu | Is  It  its  an  my  the  they  name  of  at  country  city  pakistan  islamic  national  language  urdu |

**Console Output:**

Following words are misspelled in given file:

coutry

national

languge

**Note:**

Download the files “input.txt” and “dictionary.txt” from portal.