Web Technologies

Fall 2020

LAB-01

Date: April 5, 2023.

The objective of this lab is to

1. Practice basic python programming concepts.
2. Utilize built-in python data structures like *lists, tuples, dictionaries, exception handling and file handling.*
3. Practice DRY (don't repeat yourself) via functions.

Instructions!

1. Keep your student identity cards with you.
2. This is an individual lab, you are strictly **NOT** allowed to discuss your solutions with your fellow colleagues, even not allowed to ask how is he/she is doing, it may result to **zero marks**.
3. You can **ONLY** discuss this with TAs or Ma'am.
4. Save your work frequently. Make a habit of pressing CTRL+S after every line of code you write.
5. This is a **GRADED** lab, so, at the end of the lab session, you should have your complete work ready for evaluation.
6. Follow proper coding conventions and put comments where needed.
7. ***Total Time for this Lab is 50 minutes.***

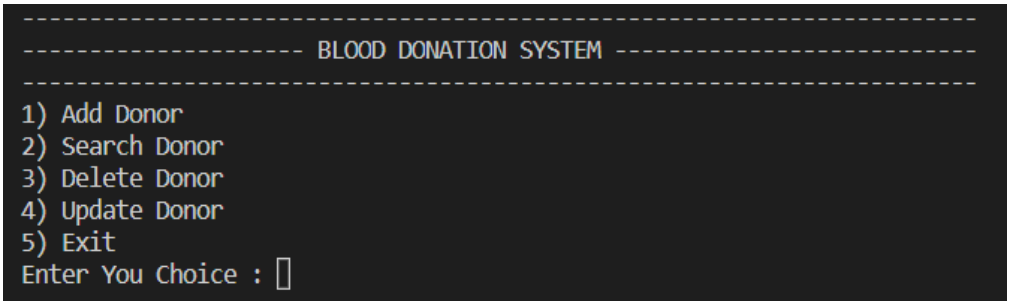
Task 01 **[10+10+5+10+10(Exception Handling)]**

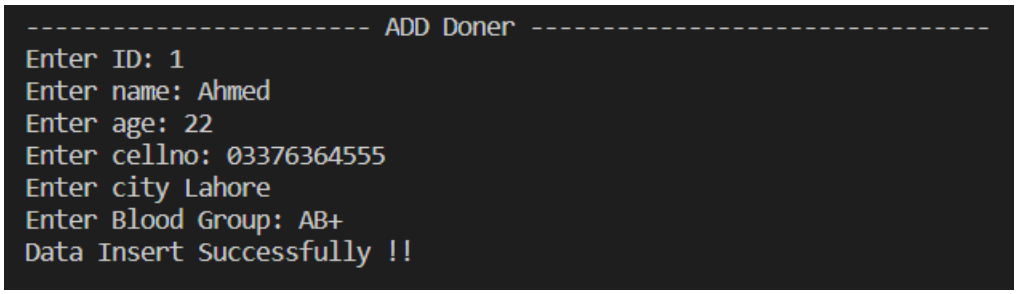
Blood Donation System

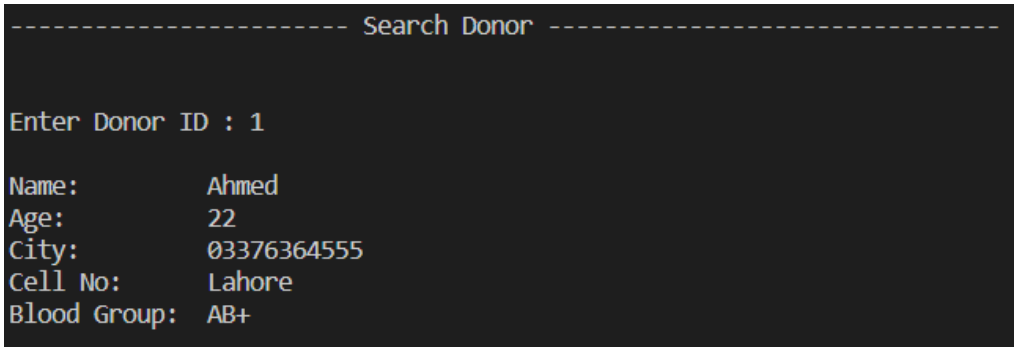
For this task, you are being asked to create a software system that manages blood donations. The system should allow users to input, retrieve, update, and delete data about blood donors. To accomplish this, you will need to create a file called "DonorData.txt" that will be used to store the donor information.

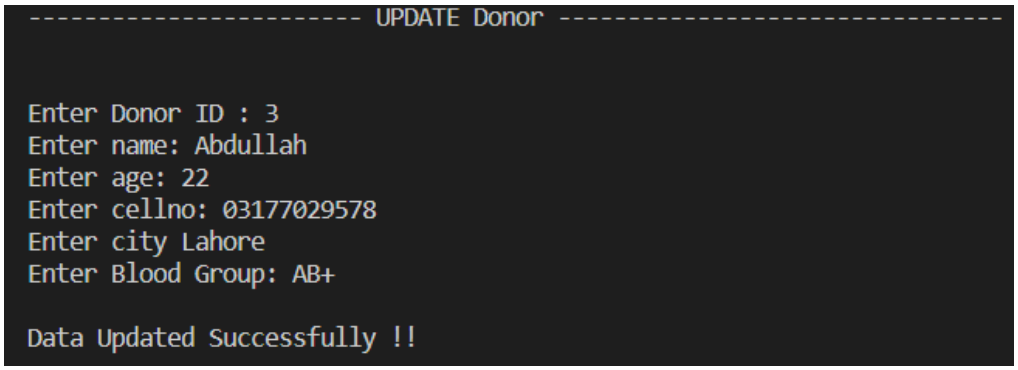
To make the system user-friendly, you need to create a menu-based system that will allow users to navigate and perform the necessary actions. The menu should have options for creating a new donor record, retrieving an existing donor record, updating an existing donor record, and deleting a donor record.

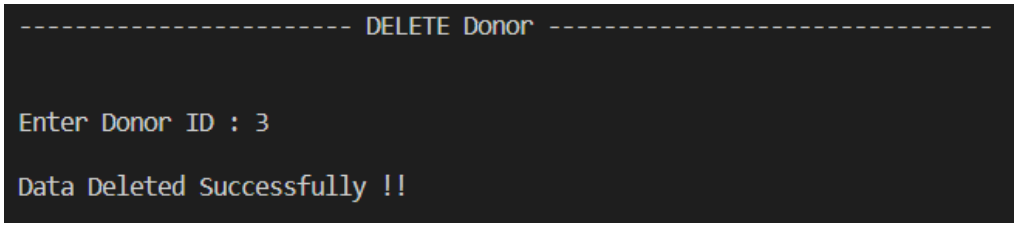
Prototype of Blood Donation System:











File Format:

The file “DonorData.txt” should be formatted to represent donor data in this structure.

```
100,Abdullah,AB-,03141544233,Lahore,18
101,Ahmad,A+,03151234567,Lahore,20
102,Aliyan,B+,0345678888,Faisalabad,22
102,Ibrahim,B-,0345678888,Faisalabad,24
102,Ali,o-,0345678888,Faisalabad,21
```

Use the Dictionary Python built-in data structure for storing data. Keys of dictionary are ID, name, age, cellNo, city, bloodGroup

NOTE: Use the Exception Handling for Input validation and Error throwing.

(BEST OF LUCK)

"The best error message is the one that never shows up."