

BA4318 Data Processing with Python

Fall 2018 Midterm Exam

21.11.2018

Start: 15:00 / End 16:30

Develop a Python program with the following objective.

We need to **calculate the bottom line (debit or credit)** in a general ledger.

You will be supplied the ledger named as a file named "Tab Seperated Ledger.txt". The content of the file looks like this:

| | | | |
|------------|--------------------------------------|---------|---------|
| 1.01.2018 | Account creation | 1000,00 | 0,00 |
| 10.01.2018 | Payment for receipt dated 10.12.2017 | 0,00 | 1000,00 |
| 12.03.2018 | Receipt dated 10.03.2018 | 2360,00 | 0,00 |

Here all columns are separated with the tab character "\t".

Your program should have the following features:

1. One function to read from the file which is expected to be in the same folder as your program. This function should read each line and parse it into columns. Then the columns should be filled into a list or tuple of your choice.
 - a. Because the explanation text includes spaces (but not tabs) you should be careful to **parse using only tabs as separators.**
 - b. Note that the columns for numbers uses "," as decimal point. You should make sure you can convert these into floats. If you have problem with that, you may **try replacing "," with "." character before the conversion.**
2. One function to process the list or tuple you created. This function should sum up all debts and all credits, and then calculate the difference. It should print on screen messages similar to the following:

This account balance is 1.000,00 (Debit)

This account balance is 1.000,00 (Credit)

Notes:

1. Name you program file as ledger.py
2. Write your name and student number as a comment in the first line of your program.
3. When you are done. Upload it into the ODTUCLASS upload area. Because ODTUCLASS differ
4. This exam is open book including digital resources such as the course Github. But you will be monitored and you should use your digital resources properly. i.e. not cheat.

Good Luck!