## Lab Assignment 7

# **Objective:**

To work with classes.

#### **Assignment:**

Define a class named 'Account' with 5 attributes and initialize them as below

Key	value	data type	
Name	<userinput></userinput>	(string)	
Savings	100	(float)	
checking	20	(float)	
Card	10	(float)	
Limit	50	(int)	

1) Create a menu(), which will display the options as shown below:

Option 1: Check Balance

Option 2: Exit

Option 1(Check Balance), should call a function check\_balance().

2) The function, check\_balance() should display the account owner's name, his Account Balance and Available Balance in exact format and alignment as below.

Account owner's name: <Account.name>

	Accou	Account Balance		Available Balance	
Savings	\$	100.00	\$	90.00	
Checking	\$	20.00	\$	20.00	
Card	\$	10.00	\$	40.00	

*Note: The alignment must be the same* 

- 3) Data in the Account balance column is hardcoded; data in the available balance column should be computed dynamically. Rules to compute available balance of account:
  - a) \$10 minimum amount must be maintained in the savings account. Therefore, the available balance is the account balance plus minimum amount.
  - b) Checking account can have any amount larger than or equal to 0
  - c) Card available balance cannot exceed its limit, so the available balance is the difference between the limit and current card balance.
  - d) If requirements aren't met, 'Available account' should be illustrated as 0, for all options

## **Tip**

You can use string formatting in conjunction with tab for output alignment but using only tbwill not be a good choice.

### **Sample output:**

```
Hello, enter your name to start
Aydan
1 Check balance
     2 Exit
Enter the number corresponding to your choice
***********
     Account owner's name
                       Aydan
               Account Balance
                             Available Balance
              $ 1,000.00
$ 20.00
     Savings
                              $ 1,010.00
     Checking
                               $
                                   20.00
                               $
     Card
               $
                    100.00
                                   400.00
**********
***************
     1 Check balance
     2 Exit
Enter the number corresponding to your choice
```

#### **Instructions:**

• Preferred programming environment:

OS: Linux (Mint)

o Interpreter: Python 3 (not Python 2)

o Editor : gedit or editor of your choice

- The program is saved as a file with .py extension.
- The program should include a comment block at the top with your name, course number and course section, assignment number

```
For example:
# Your name
# CSCI II 161 L01/L02
# Assignment 6
```

• Upload your file as your *lastname\_firstname\_assignmentnumber.py* For example:

lastname\_firstname\_7.py