NOVA
NOVA SCHOOL OF
BUSINESS & ECONOMICS

INTRODUCTION TO PROGRAMMING
19/20 S2
Group Work in Class 01

Rules

1. Your group must be 3 or 4 elements maximum.
2. You can use internet or any other appointments you might have.
3. You should not copy from other groups.
4. The top 3 groups will be recommended the professors in LinkedIn
5. You should deliver a file named groupnumber_bank.py
6. You should put in comments in the first line of your delivery file, the group student numbers.
7. **DELIVERY DATE: Thursday, 12th March 17h. After this the repository will be closed and no more GWiC will be accepted.**

Read everything with attention!

The Group Work in Class (GWiC) objective is to create the Bank Rupt bank management system.

Because this is a bank, and security is very important, only registered users with **username** and **password** can access to the program menu. Also, you have 3 attempts to login. If you fail the **3 attempts**, the **user will be locked** and cannot login again, unless it is unlocked. During the 3 attempts, the user must be warned on the number of attempts remaining until it gets locked. And if it is locked, a message with this status change must also be displayed. For a detailed example, see the outputs below for each of the possible cases.

The program will have **two different types of users**, the **administrators** and the **clients**.
For each type of user, the menu options will be different.
For now, no options will be defined. Only the **logout** option will be available for both user types.

With the above requisites, your group goal is to replicate **EXACTLY** the following outputs in your own program.

Also, to create sample data for your program, **you should create a user data structure with key value pairs that represent the client necessary attributes.**
You should create at least 3 clients of type client and one client of type admin

Client successful login/logout and exit

```
Welcome to Bank Rupt.

1. Login
2. Exit

Please select one option from the menu: 1

Please insert your username: pedro

Please insert your password: pedro

hello client pedro

1. Client options
0. Logout

Please select one option from the menu: 0

Goodbye pedro.

1. Login
2. Exit

Please select one option from the menu: 2
Goodbye
```

Administrator successful login/logout and exit

```
Welcome to Bank Rupt.

1. Login
2. Exit

Please select one option from the menu: 1

Please insert your username: admin

Please insert your password: admin

hello admin admin

1. Admin options
0. Logout

Please select one option from the menu: 0

Goodbye admin.

1. Login
2. Exit

Please select one option from the menu: 2
Goodbye
```

Login with non-existing username

```
Welcome to Bank Rupt.

1. Login
2. Exit

Please select one option from the menu: 1

Please insert your username: jose
User does not exist.
1. Login
2. Exit

Please select one option from the menu:
```

Login with existing username but wrong password and lock

```
Welcome to Bank Rupt.

1. Login
2. Exit

Please select one option from the menu: 1

Please insert your username: pedro

Please insert your password: e
Wrong password.
You have 2 attempts to login.

Please insert your password: e
Wrong password.
You have 1 attempts to login.

Please insert your password: e
Wrong password.
User pedro is locked. Contact bank administrator.

1. Login
2. Exit

Please select one option from the menu:
```

Login with locked user

```
1. Login
2. Exit

Please select one option from the menu: 1

Please insert your username: pedro

Please insert your password: pedro
User is locked. Contact bank administrator.

1. Login
2. Exit

Please select one option from the menu:
```

Menu with wrong input options (wrong numbers only)

```
Welcome to Bank Rupt.

1. Login
2. Exit

Please select one option from the menu: 4
Please select a valid option.
1. Login
2. Exit

Please select one option from the menu:
```