

Specification of task: Bank account

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Description:

The program will manage bank accounts. The user should be able to open an account, deposit and withdraw money, change PIN code and see the last ten transactions.

All account data must be saved on file between runs.

----- Classes -----

The Account class that represents a bank account.

Attribute:

name A string with the account holder's name
Balance An integer - money in the account right now
Pin code A string with the ATM code, 4 digits
transactions A list of the last ten deposits / withdrawals

Methods:

```
def __init__ (self, name, money):  
    """ "Creates new account.  
    CHANGES name, balance, pin_code, transactions """ "  
  
def __str__ (self):  
    """ "Account information for printing.  
    RETURNS name and balance as a string """ "  
  
def outlet (self):  
    """ "Withdraws money from the account.  
    CHANGES BALANCE """ "
```

```

def deposit (self):
    """ "Deposits money into the account.
        CHANGES BALANCE """

def ok_PIN (self):
    """ "Requests PIN and checks if it is correct.
        RETURNS True if the code was correct, False otherwise """

def change_PIN (self):
    """ "Allows the user to change code.
        CHANGES pin_code """

```

----- Data structure -----

Each bank account is represented by an Account object.

All bank accounts are stored in a dictionary with the name as the key. Between program runs, all data is stored on a text file.

Simon Semla 48000 1234 [-500,28000,-1000,-1000...]	Rita Hayworth 2000000 9999 [-500,-500.200,-1000...]	
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----- Functions -----

```

def las_in_konton (fil):
    """ "Loading accounts from file.
        INDATA is the file
        OUTDATE a dictionary with all account information """

def menu ():
    """ "Prints the menu:
        - Open a new account

```

- Deposit
- Replace pin
- View transactions "" "

```
def menu option ():
```

```
    """ "Loads what the user chooses to do.
```

```
    OUTPUT is a number - selected menu item. "" "
```

```
def anropa (val)
```

```
    """ "Invokes the method selected by the user.
```

```
    INDATA is the number that corresponds to the selected option in the
    menu. "" "
```

```
def visa_accounts (accounts):
```

```
    """ "Prints info about all accounts on the screen.
```

```
    INDATA is all accounts "" "
```

```
def lagra_i_fil (file, accounts):
```

```
    """ "Stores account info on file.
```

```
    INDATA is the file and accounts "" "
```

```
-----Algorithm-----
```

1. The program loads all accounts from file

2. Identifies the account holder. If the PIN is correct: 3. Repeat the following until the user wants to quit:

- * Download the account
- * Show menu
- * Load menu options
- * Call selected method

4. When the user chooses to quit, the changed account information (the entire dictionary) must be printed on the file again.