

# Functions Challenge 33:

## Bank Deposit and Withdrawal App

### Description:

You are responsible for writing a program that will simulate an online banking application. A user will create an account with your fictitious bank. The account will include a savings account and a checking account. Users will then be able to make deposits or withdrawals from either account as long as the remaining balance is non negative.

### Step By Step Guide:

*Define your functions:*

- Define a function `get_info()` which will take zero parameters.
  - Print a welcome message.
  - Get user input for their name.
  - Get user input for an initial deposit into their savings account.
  - Get user input for an initial deposit into their checking account.
  - Create a dictionary that has three key-value pairs.
    - Each input from the user should be a value that is paired with a corresponding key.
  - Return the dictionary.
- Define a function `make_deposit()` which will take three parameters; a dictionary representing a bank account, a string which will represent a type of account (savings or checking) and a float representing how much money to deposit to the account.
  - Update the correct key-value pair in the dictionary to add the given amount of money to the correct account.
  - Print a message confirming this update.
  - There is no need to return our dictionary since it is a mutable object and can be changed right inside of the function.
- Define a function `make_withdrawal()` which will take three parameters; a dictionary representing a bank account, a string which will represent a type of account (savings or checking) and a float representing how much money to withdraw from the account.
  - If the account will have a positive balance after the transaction:
    - Update the correct key-value pair in the dictionary to subtract the given amount of money to the correct account.
    - Print a message confirming this update.
  - Else, the account has a negative balance.
    - Do not update the account.
    - Print a message that the user will have a negative balance and therefore no transaction has occurred.
  - There is no need to return our dictionary since it is a mutable object and can be changed right inside of the function.

- Define a function `display_info()` which will take one parameter; a dictionary representing a bank account.
  - Print all the information in the given dictionary.
  - There is no return value for this function.

*Your main code:*

- Create an account by calling the `get_info()` function.
- Create a flag variable and set it to `True`.
- Use this variable with a while loop to. Each iteration you should:
  - Display the current account information by calling the `display_info()` function.
  - Get user input for the type of account they would like to access.
  - Get user input for the type of transaction they would like to make.
  - Get user input for how much money they wish to work with.
  - If the given account type is either savings or checking:
    - If the transaction is either deposit or withdrawal:
      - Call the appropriate function representing the transaction.
    - Else, print a message stating that the transaction cannot be completed.
  - Else, print a message stating that the transaction cannot be completed.
  - Get user input for if they would like to make another transaction.
    - If they do not:
      - Display the current account information by calling the `display_info()` function.
      - Print a thank you message and end the program.
- Use at least 2 comments to describe sections of your code.
- “Chunk” your code so that is readable.
- Use appropriate and informative variable names.
- Format your output as below.

### Example Output:

Welcome to the Python First National Bank.

Hello, what is your name: john james

How much money would you like to set up your savings account with: 1200

How much money would you like to set up your checking account with: 300

Current Account Information:

Name: John James

Savings: \$1200

Checking: \$300

What account would you like to access (Savings or Checking): savings

What type of transaction would you like to make (Deposit or Withdrawal): deposit

How much money: 150

Deposited \$150 into John James's savings account.

Would you like to make another transaction (y/n): y

Current Account Information:

Name: John James

Savings: \$1350

Checking: \$300

What account would you like to access (Savings or Checking): SAVINGS

What type of transaction would you like to make (Deposit or Withdrawal): withdrawal

How much money: 50

Withdrew \$50 from John James's savings account.

Would you like to make another transaction (y/n): y

Current Account Information:

Name: John James

Savings: \$1300

Checking: \$300

What account would you like to access (Savings or Checking): Checking

What type of transaction would you like to make (Deposit or Withdrawal): WITHDRAWAL

How much money: 500

Sorry, by withdrawing \$500 you will have a negative balance.

Would you like to make another transaction (y/n): y

Current Account Information:

Name: John James

Savings: \$1300

Checking: \$300

What account would you like to access (Savings or Checking): credit

What type of transaction would you like to make (Deposit or Withdrawal): deposit

How much money: 40

I'm sorry, we cannot do that for you today.

Would you like to make another transaction (y/n): y

Current Account Information:

Name: John James

Savings: \$1300

Checking: \$300

What account would you like to access (Savings or Checking): savings

What type of transaction would you like to make (Deposit or Withdrawal): d

How much money: 550

I'm sorry, we cannot do that for you today.

Would you like to make another transaction (y/n): n

Thank you. Have a great day!