

# Banking Application Documentation(Python-MYSQL)

## Overview:

This document provides a comprehensive explanation of the functions and SQL queries utilized in the Banking Application developed using Python. The application allows users to perform various banking operations, including opening an account, depositing money, withdrawing money, checking account balances, displaying customer details, and closing accounts. It interacts with a MySQL database named BANK\_MANAGEMENT for data storage.

## Functions:

### 1. openAcc()

- This function is responsible for opening a new account. It collects user information such as name, account number, date of birth, address, contact number, and opening balance.
- It inserts the account details into the account table and the opening balance into the amount table using SQL queries.

### 2. DepoAmo()

- Allows users to deposit money into their accounts.
- Retrieves the current account balance from the amount table, updates it with the deposited amount, and updates the balance in the database.

### 3. withdrawAmount()

- Permits users to withdraw money from their accounts.
  - Retrieves the current account balance from the amount table, deducts the withdrawn amount, and updates the balance in the database.
4. deposit(): Similar to withdraw(), this function permits users to deposit money. It creates a screen for depositing funds.

### 5. balEnq()

- Facilitates balance inquiry for a given account number.
- Retrieves the balance associated with the account number from the amount table and displays it.

### 6. DisDetails()

- Displays detailed customer information for a given account number.
- Retrieves all customer details for the specified account number from the amount table and displays them.

### 7. CloseAccount()

- Closes an account by deleting both account and balance information associated with a given account number.
- Deletes records from both the account and amount tables using SQL queries

### 8. main()

- The main function provides a menu for users to select different banking operations.
- It takes user input to execute the chosen operation by invoking the respective functions.

# SQL QUERIES:

## 1. Inserting New Account

- **sql1 = 'INSERT INTO account VALUES (%s, %s, %s, %s, %s, %s)'**: This SQL query inserts account details (name, account number, date of birth, address, contact number, opening balance) into the **account** table.
- **sql2 = 'INSERT INTO amount VALUES (%s, %s, %s)'**: This SQL query inserts opening balance information (name, account number, opening balance) into the **amount** table.

## 2. Updating Account Balance (Deposits and Withdrawals)

- To update the account balance, the script fetches the current balance using a **SELECT** query based on the account number, calculates the new balance, and then uses an **UPDATE** query to modify the balance in the **amount** table.

## 3. Retrieving Account Information

- **a = 'SELECT \* FROM amount WHERE AccNo=%s'**: This SQL query is used to retrieve account information (name, account number, balance) for a specified account number.

## 4. Closing an Account

- The script uses **DELETE** queries to remove both account details and balance information associated with a specified account number.