

Mini Project: Banking Application

Objective:

Create a simple banking application using Python with the following structure and functionality.

banking_app/

|__ __init__.py

|__ bankcore.py

|__ accounts.py

|__ main.py

Instructions:

1. Create a Python Package:

- Name your package: banking_app

2. Modules in the Package:

Your package should have at least two modules:

◇ bankcore

◇ accounts

◇ main

3. Module Details & Requirements:

Module 1. bankcore module

Implement the following:

◇ **Variable:** branch_id = 2057

◇ **Variable:** customer_id = ??

How customer_id will be generated?

- **customer_id format:** <brach_id>-<user number>
- **example1:** 2057-1 here 2057 represent brach_id and 1 represent user number
- **example2:** 2057-7 here 2057 represent brach_id and 7 represent user number

◇ **Users_Info:** User info will be stored in dictionary: customer_id, name, password

◇ **Function:** create_account(name, id, password) — Should register a new user.

◇ **Function:** login(customer_id, password)

- If credentials match, allow user to proceed.
- If not, print “Invalid login”.

Module 2. accounts module

Implement the following:

◇ balance_record: Dictionary to store users balance contains: customer_id, and balance.

◇ **Function:** check_balance(customer_id) — Returns user's current balance.

◇ **Function:** deposit(customer_id, amount) — Adds amount to user's balance.

◇ **Function:** withdraw(customer_id, amount)

- Deducts amount from balance if enough funds, else print “Insufficient balance”.

Module 3. main module

Implement the following

1. Import both modules, i.e., bankcore, accounts
2. Add main function:

Show a welcome message first >> Welcome to ABC Bank

Select 1 or 2:

1. Login to the account.
 2. Create an account.
3. Try Deposit and withdraw money.
 4. Try Check balance.
 5. call relevant functions from both modules (i.e., bankcore, accounts) where needed.

Tips:

- ◇ Properly manage user authentication.
- ◇ Handle possible errors (e.g. invalid login, insufficient balance, etc.)

Deliverables → banking_app folder with two modules: bankcore.py, accounts.py and main.py.