

Banking

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In [1]: class BankAccount:
    def __init__(self, account_number, account_holder, balance=0):
        self.account_number = account_number
        self.account_holder = account_holder
        self.balance = balance
        self.is_logged_in = False

    def login(self, account_number):
        if account_number == self.account_number:
            self.is_logged_in = True
            print(f"Login successful for account: {self.account_number}")
        else:
            print("Login failed. Account number not recognized.")

    def deposit(self, amount):
        if self.is_logged_in:
            if amount > 0:
                self.balance += amount
                print(f"Deposited: ${amount}. New balance: ${self.balance}.")
            else:
                print("Deposit amount must be positive.")
        else:
            print("Please login to deposit money.")

    def withdraw(self, amount):
        if self.is_logged_in:
            if 0 < amount <= self.balance:
                self.balance -= amount
                print(f"Withdrew: ${amount}. New balance: ${self.balance}.")
            else:
                print("Insufficient balance or invalid withdrawal amount.")
        else:
            print("Please login to withdraw money.")

    def check_balance(self):
        if self.is_logged_in:
            print(f"Current balance: ${self.balance}.")
        else:
            print("Please login to check balance.")
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In [29]: def main():
    account = BankAccount("123456", "Alice")

    account.login("123456")

    account.deposit(1000)
    account.withdraw(500)
    account.check_balance()

if __name__ == "__main__":
    main()
```

Login successful for account: 123456
Deposited: \$1000. New balance: \$1000.
Withdrew: \$500. New balance: \$500.
Current balance: \$500.

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In [15]: def main():  
         account2 = BankAccount("654321", "Bob")  
         account2.withdraw(100)  
  
         if __name__ == "__main__":  
             main()
```

Please login to withdraw money.

In []: