

Mini Project 2: Banking System

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In [14]: class BankAccount:
    def __init__(self, username, password):
        self.username = username
        self.password = password
        self.balance = 50000
        self.is_logged_in = False

    def login(self, username, password):
        if username == self.username and password == self.password:
            self.is_logged_in = True
            print("Login successful!")
        else:
            print("Invalid credentials!")

    def deposit(self, amount):
        if self.is_logged_in:
            self.balance += amount
            print(f"Amount Deposited: {amount}. New Balance: {self.balance}")
        else:
            print("Please login to deposit the amount.")

    def withdraw(self, amount):
        if self.is_logged_in:
            if amount > self.balance:
                print("Insufficient balance.")
            else:
                self.balance -= amount
                print(f"Amount Withdrawn: {amount}. New Balance: {self.balance}")
        else:
            print("Please login to withdraw the amount.")

    def transfer(self, target_account, amount):
        if self.is_logged_in:
            if amount <= self.balance:
                self.balance -= amount
                print(f"Transferred to target_account {amount}. New Balance: {self.balance}")
            else:
                print("Insufficient balance for the transfer.")
        else:
            print("Please login to make a transfer.")

    def check_balance(self):
        if self.is_logged_in:
            print(f"Your current balance is: {self.balance}")
        else:
            print("Please login to check your balance.")

    def logout(self):
        self.is_logged_in = False
        print("Logged out successfully.")

# Main function to run the banking system
def main():
    # Create a bank account with a username and password
    account = BankAccount('della', '123')
    target_account = BankAccount('kevin', "None")

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while True:
    print("\nWelcome to the Banking System")
    print("1: Login")
    print("2: Deposit")
    print("3: Withdraw")
    print("4: Transfer")
    print("5: Check Balance")
    print("6: Logout")

    user_input = input("Please choose an option: ")

    if user_input == '1':
        username = input("Enter your username: ")
        password = input("Enter your password: ")
        account.login(username, password)

    elif user_input == '2':
        if account.is_logged_in:
            amount = float(input("Enter the amount to deposit: "))
            account.deposit(amount)
        else:
            print("You must login first.")

    elif user_input == '3':
        if account.is_logged_in:
            amount = float(input("Enter the amount to withdraw: "))
            account.withdraw(amount)
        else:
            print("You must login first.")

    elif user_input == '4':
        if account.is_logged_in:
            amount = float(input("Enter the amount to transfer: "))
            # Assuming you have a way to get the recipient's account object
            account.transfer("kevin", amount)
        else:
            print("You must login first.")

    elif user_input == '5':
        account.check_balance()

    elif user_input == '6':
        account.logout()

    next_transaction = input("Would you like to do another transaction? (yes/no): ")
    if next_transaction.lower() != 'yes':
        print("Thank you for using the Banking System. Goodbye!")
        break

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

Welcome to the Banking System

1: Login

2: Deposit

3: Withdraw

4: Transfer

5: Check Balance

6: Logout

Please choose an option: 1

Enter your username: della

Enter your password: 123

Login successful!

Would you like to do another transaction? (yes/no): yes

Welcome to the Banking System

1: Login

2: Deposit

3: Withdraw

4: Transfer

5: Check Balance

6: Logout

Please choose an option: 2

Enter the amount to deposit: 10000

Amount Deposited: 10000.0. New Balance: 60000.0

Would you like to do another transaction? (yes/no): yes

Welcome to the Banking System

1: Login

2: Deposit

3: Withdraw

4: Transfer

5: Check Balance

6: Logout

Please choose an option: 3

Enter the amount to withdraw: 5000

Amount Withdrawn: 5000.0. New Balance: 55000.0

Would you like to do another transaction? (yes/no): yes

Welcome to the Banking System

1: Login

2: Deposit

3: Withdraw

4: Transfer

5: Check Balance

6: Logout

Please choose an option: 4

Enter the amount to transfer: 25000

Transferred to target_account 25000.0. New Balance: 30000.0

Would you like to do another transaction? (yes/no): yes

Welcome to the Banking System

1: Login

2: Deposit

3: Withdraw

4: Transfer

5: Check Balance

6: Logout

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Please choose an option: 5
Your current balance is: 30000.0
Would you like to do another transaction? (yes/no): yes
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Welcome to the Banking System
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1: Login
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2: Deposit
```

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3: Withdraw
```

```
4: Transfer
```

```
5: Check Balance
```

```
6: Logout
```

```
Please choose an option: 6
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Logged out successfully.
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Would you like to do another transaction? (yes/no): no
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```
Thank you for using the Banking System. Goodbye!
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In []:

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