

Assignment no. 03

Banking System

Output:

Task 1-

```
PS C:\Users\Vishal Jha\Desktop\03. Banking System> python -
Connected.
Task 1:
Enter credit score: 750
Enter annual income: 600000
Congratulations! You are eligible for a loan.
```

Task 2-

```
Task 2:
Enter current balance: 50000
Enter transaction type (Check Balance/Withdraw/Deposit): Withdraw
Enter amount: 500
Withdrawal successful. Remaining balance: 49500.0
```

Task 3-

```
Withdrawal successful. Remaining balance: 49500.0
Task 3:
Enter the number of customers: 1
Enter initial balance: 5000
Enter annual interest rate: 12
Enter the number of years: 3
Future balance after 3 years: 7024.640000000002
```

Task 4-

```
Task 4:
Enter your account number: 101
Invalid account number. Please try again.
Enter your account number: 1
Invalid account number. Please try again.
Enter your account number: 1001
Invalid account number. Please try again.
Enter your account number: 232323
Invalid account number. Please try again.
Enter your account number: 123
Account balance for account 123: 1000.0
```

Task 5-

```
Task 5:
Create a password for your bank account: vishal
Invalid password. Please follow the password rules.
```

```
Task 5:
Create a password for your bank account: Vishal123
Password is valid.
```

Task 6-

```
Invalid password. Please follow the password rules.  
Task 6:  
Enter a transaction (Type 'exit' to finish): exit  
Transaction History:  
Task 7:
```

Task 7-

```
Task 7:  
Customer ID: 1  
Name: John Doe  
Email: john.doe@email.com  
Phone Number: 1234567890  
Address: 123 Main St  
Account Number: 1001  
Account Type: Savings  
Balance: 1000  
Customer: None  
Withdrawal successful.  
Interest of 58.5 added to the account.  
Account Number: 1001  
Account Type: Savings  
Balance: 1358  
Customer: None
```

Task 8-

```
Task 8:  
Account Number: 1002  
Account Type: Savings  
Balance: 1500  
Customer: None  
Account Number: 1003  
Account Type: Current  
Balance: 2000  
Customer: None  
Interest of 75.0 added to the Savings account.  
Withdrawal successful. Overdraft used: 500  
Account Number: 1002  
Account Type: Savings  
Balance: 1575  
Customer: None  
Account Number: 1003  
Account Type: Current  
Balance: 0  
Customer: None
```

Task 9-

```
Customer: None  
Task 9: Done in entity
```

Task 10-

```
Task 12: Completed in exceptions and bankserviceproviderimpl  
1. Create Account  
2. List Accounts  
3. Calculate Interest  
4. Exit  
Enter your choice: 1  
Enter Account Type (Savings/Current): Savings  
Enter Initial Balance: 50000  
Account created successfully.  
1. Create Account
```

Task 11-

```
Enter your choice: 2
{'account_number': 1, 'customer': {'customer_id': 1, 'name': 'John Doe'}, 'account_type': 'Savings', 'balance': 52250.0}
1. Create Account
2. List Accounts
3. Calculate Interest
4. Exit
```

Task 12-

```
1. Create Account
2. List Accounts
3. Calculate Interest
4. Exit
Enter your choice: 3
Interest of 2250.0 added to the account 1.
Interest calculated successfully.
```

Task 13-

```
Task 14:
1. Create Account
2. List Accounts IDs
3. Get Account Balance
4. Deposit
5. Withdraw
6. Transfer
7. Get Account Details
8. Get Transactions
9. Exit
Enter your choice: 6
Enter From Account ID: 101
Enter To Account ID: 102
Enter Transfer Amount: 5000
Amount withdrawn from account ID 101 successfully
Amount deposited in account ID 102 successfully
```

Task 14-

```
Amount deposited in account ID 102 successfully
1. Create Account
2. List Accounts IDs
3. Get Account Balance
4. Deposit
5. Withdraw
6. Transfer
7. Get Account Details
8. Get Transactions
9. Exit
Enter your choice: 5
Enter Account ID: 102
Enter Withdrawal Amount: 5000
Amount withdrawn from account ID 102 successfully
1. Create Account
```

Task 15-

```
1. Create Account
2. List Accounts IDs
3. Get Account Balance
4. Deposit
5. Withdraw
6. Transfer
7. Get Account Details
8. Get Transactions
9. Exit
Enter your choice: 9
Exiting the application.
```