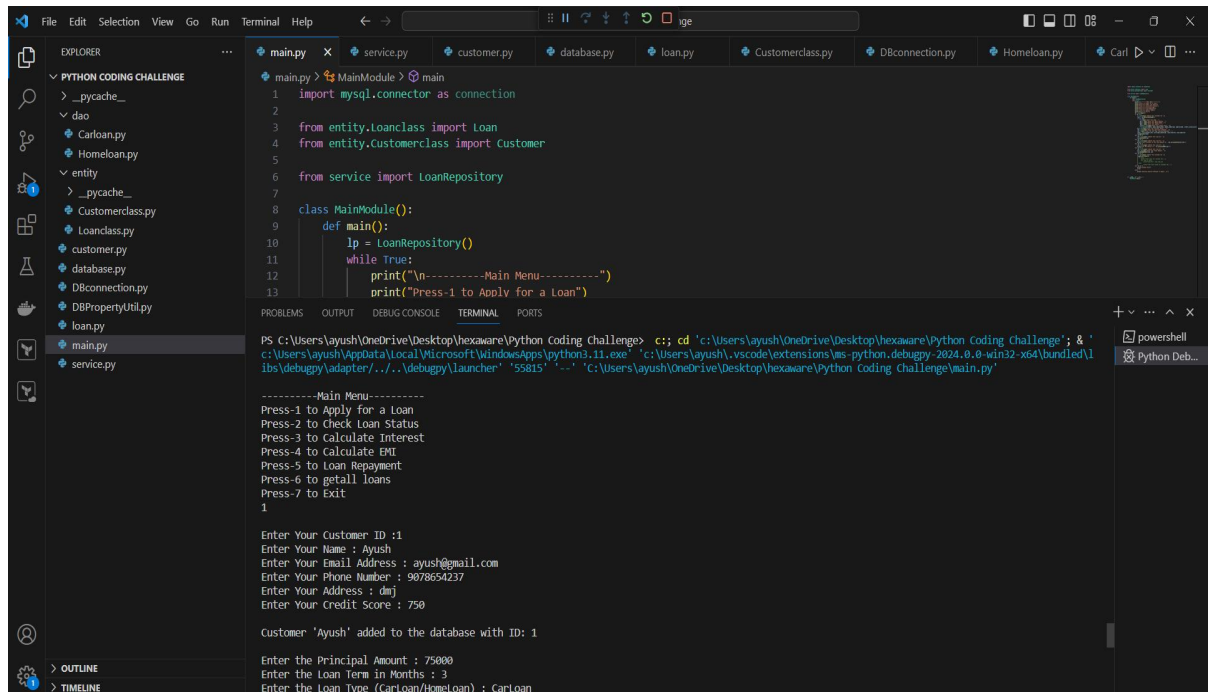


Coding Challenge - Loan Management System



The screenshot shows the VS Code editor with the following files in the Explorer: `_pycache_`, `dao`, `CarLoan.py`, `HomeLoan.py`, `entity`, `_pycache_`, `Customerclass.py`, `Loanclass.py`, `customer.py`, `database.py`, `DBconnection.py`, `DBPropertyUtil.py`, `loan.py`, `main.py`, and `service.py`. The `main.py` file is open, showing the following code:

```
1 import mysql.connector as connection
2
3 from entity.Loanclass import Loan
4 from entity.Customerclass import Customer
5
6 from service import LoanRepository
7
8 class MainModule():
9     def main():
10         lp = LoanRepository()
11         while True:
12             print("\n-----Main Menu-----")
13             print("Press-1 to Apply for a Loan")
```

The terminal output shows the following commands and results:

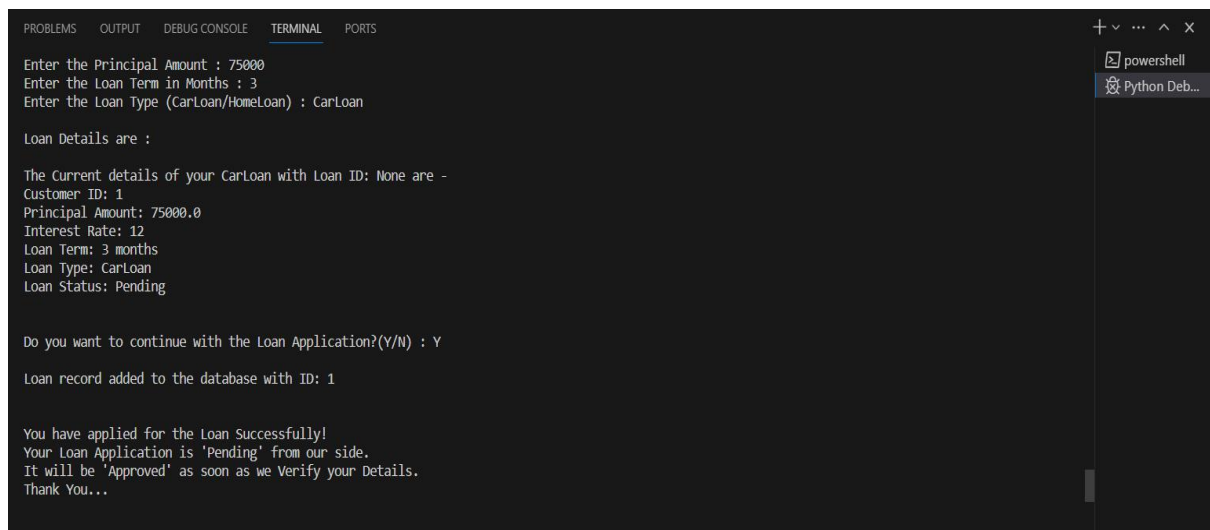
```
PS C:\Users\ayush\OneDrive\Desktop\hexaware\Python Coding Challenge> cd 'C:\Users\ayush\OneDrive\Desktop\hexaware\Python Coding Challenge' & 'c:\Users\ayush\AppData\Local\Microsoft\WindowsApps\python3.11.exe' 'c:\Users\ayush\.vscode\extensions\ms-python.debugpy-2024.0.0-win32-x64\bundle\libs\debugpy\adapter\..\..\debugpy\launcher' '55815' '-.' 'C:\Users\ayush\OneDrive\Desktop\hexaware\Python Coding Challenge\main.py'

-----Main Menu-----
Press-1 to Apply for a Loan
Press-2 to Check Loan Status
Press-3 to Calculate Interest
Press-4 to Calculate EMI
Press-5 to Loan Repayment
Press-6 to getall loans
Press-7 to Exit
1

Enter Your Customer ID : 1
Enter Your Name : Ayush
Enter Your Email Address : ayush@gmail.com
Enter Your Phone Number : 987854237
Enter Your Address : dmj
Enter Your Credit Score : 750

Customer 'Ayush' added to the database with ID: 1

Enter the Principal Amount : 75000
Enter the Loan Term in Months : 3
Enter the Loan Type (CarLoan/HomeLoan) : CarLoan
```



The terminal output continues with the following commands and results:

```
Enter the Principal Amount : 75000
Enter the Loan Term in Months : 3
Enter the Loan Type (CarLoan/HomeLoan) : CarLoan

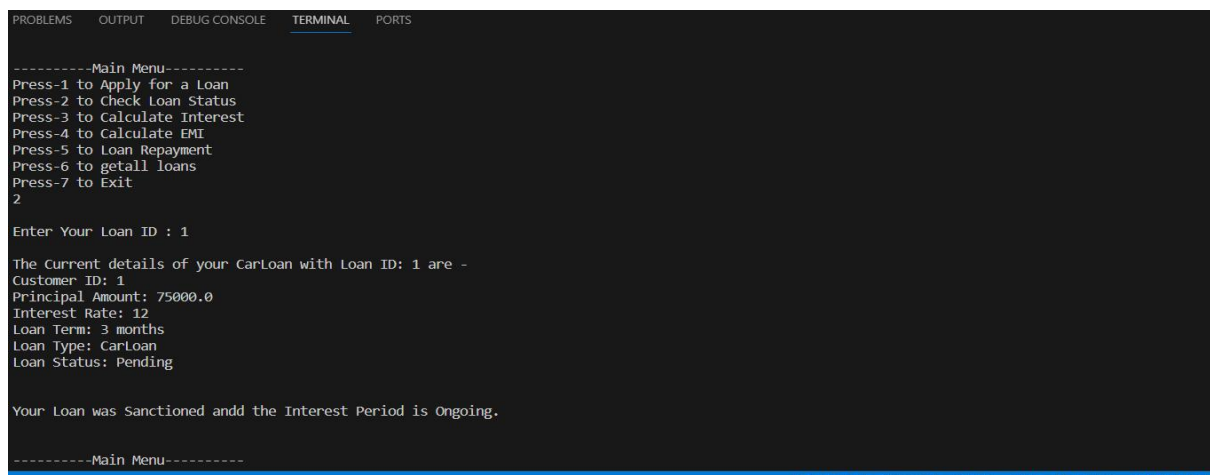
Loan Details are :

The Current details of your CarLoan with Loan ID: None are -
Customer ID: 1
Principal Amount: 75000.0
Interest Rate: 12
Loan Term: 3 months
Loan Type: CarLoan
Loan Status: Pending

Do you want to continue with the Loan Application?(Y/N) : Y

Loan record added to the database with ID: 1

You have applied for the Loan Successfully!
Your Loan Application is 'Pending' from our side.
It will be 'Approved' as soon as we Verify your Details.
Thank You...
```



The terminal output continues with the following commands and results:

```
-----Main Menu-----
Press-1 to Apply for a Loan
Press-2 to Check Loan Status
Press-3 to Calculate Interest
Press-4 to Calculate EMI
Press-5 to Loan Repayment
Press-6 to getall loans
Press-7 to Exit
2

Enter Your Loan ID : 1

The Current details of your CarLoan with Loan ID: 1 are -
Customer ID: 1
Principal Amount: 75000.0
Interest Rate: 12
Loan Term: 3 months
Loan Type: CarLoan
Loan Status: Pending

Your Loan was Sanctioned andd the Interest Period is Ongoing.

-----Main Menu-----
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

Your Loan was Sanctioned andd the Interest Period is Ongoing.

-----Main Menu-----
Press-1 to Apply for a Loan
Press-2 to Check Loan Status
Press-3 to Calculate Interest
Press-4 to Calculate EMI
Press-5 to Loan Repayment
Press-6 to getall loans
Press-7 to Exit
3

Enter Your Loan ID : 1

The Current details of your CarLoan with Loan ID: 1 are -
Customer ID: 1
Principal Amount: 75000.0
Interest Rate: 12
Loan Term: 3 months
Loan Type: CarLoan
Loan Status: Approved

Total Interest of this Loan Amounts to : 2250.0

-----Main Menu-----
```

```
-----Main Menu-----
Press-1 to Apply for a Loan
Press-2 to Check Loan Status
Press-3 to Calculate Interest
Press-4 to Calculate EMI
Press-5 to Loan Repayment
Press-6 to getall loans
Press-7 to Exit
4

Enter Your Loan ID : 1

The Current details of your CarLoan with Loan ID: 1 are -
Customer ID: 1
Principal Amount: 75000.0
Interest Rate: 12
Loan Term: 3 months
Loan Type: CarLoan
Loan Status: Approved

The EMI amounts to : 25501.658361110083
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

Total Interest of this Loan Amounts to : 2250.0

-----Main Menu-----
Press-1 to Apply for a Loan
Press-2 to Check Loan Status
Press-3 to Calculate Interest
Press-4 to Calculate EMI
Press-5 to Loan Repayment
Press-6 to getall loans
Press-7 to Exit
5

Enter Your Loan ID : 1
Enter Your Total Amount : 10000

The Current details of your CarLoan with Loan ID: 1 are -
Customer ID: 1
Principal Amount: 75000.0
Interest Rate: 12
Loan Term: 3 months
Loan Type: CarLoan
Loan Status: Approved

Sorry...The amount is too low to pay even a Single EMI
```