How to run payment feature program and test cases (Sungmoon Choi):

Change the directory to Payment directory inside Assignment-2

```
C:\Stuff>cd C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment
```

- C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>_
- Create a virtual environment (this command is using Windows, the command is different depending on the operating system)

```
C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>virtualenv venv
created virtual environment CPython3.12.1.final.0-64 in 183ms
    creator CPython3Windows(dest=C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment\venv, clear=False
, no_vcs_ignore=False, global=False)
    seeder FromAppData(download=False, pip=bundle, via=copy, app_data_dir=C:\Users\Sungpoon\AppData\Local\pypa\virtualenv)
    added seed packages: pip==24.2
    activators BashActivator,BatchActivator,FishActivator,NushellActivator,PowerShellActivator,PythonActivator
```

activate the virtual environment

```
C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>venv\Scripts\activate

(venv) C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>_
```

Using pip to install the required packages

```
C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>pip install -r requirements.txt
(venv) C:\Users\Sungpoon\Documents\GITHUD\CISCJ27 GROOFJY, Sag
Collecting Flask (from -r requirements.txt (line 1))
Using cached flask-3.0.3-py3-none-any.whl.metadata (3.2 kB)
Collecting Werkzeug>=3.0.0 (from Flask->-r requirements.txt (line 1))
  Using cached werkzeug-3.0.4-py3-none-any.whl.metadata (3.7 kB)
 ollecting Jinja2>=3.1.2 (from Flask->-r requirements.txt (line 1))
  Using cached jinja2-3.1.4-py3-none-any.whl.metadata (2.6 kB)
 ollecting itsdangerous>=2.1.2 (from Flask->-r requirements.txt (line 1))
  Using cached itsdangerous-2.2.0-py3-none-any.whl.metadata (1.9 kB)
 ollecting click>=8.1.3 (from Flask->-r requirements.txt (line 1))
  Using cached click-8.1.7-py3-none-any.whl.metadata (3.0 kB)
 ollecting blinker>=1.6.2 (from Flask->-r requirements.txt (line 1))
  Using cached blinker-1.8.2-py3-none-any.whl.metadata (1.6 kB)
 ollecting colorama (from click>=8.1.3->Flask->-r requirements.txt (line 1))
Using cached colorama-0.4.6-py2.py3-none-any.whl.metadata (17 kB)
 ollecting MarkupSafe>=2.0 (from Jinja2>=3.1.2->Flask->-r requirements.txt (line 1))
  Using cached MarkupSafe-3.0.2-cp312-cp312-win_amd64.whl.metadata (4.1 kB)
Using cached flask-3.0.3-py3-none-any.whl (101 kB)
Using cached blinker-1.8.2-py3-none-any.whl (9.5 kB)
Using cached click-8.1.7-py3-none-any.whl (97 kB)
Using cached itsdangerous-2.2.0-py3-none-any.whl (16 kB)
Using cached jinja2-3.1.4-py3-none-any.whl (133 kB)
Using cached werkzeug-3.0.4-py3-none-any.whl (227 kB)
Using cached MarkupSafe-3.0.2-cp312-cp312-win_amd64.whl (15 kB)
Using cached colorama-0.4.6-py2.py3-none-any.whl (25 kB)
Installing collected packages: MarkupSafe, itsdangerous, colorama, blinker, Werkzeug, Jinja2, click, Flask
Successfully installed Flask-3.0.3 Jinja2-3.1.4 MarkupSafe-3.0.2 Werkzeug-3.0.4 blinker-1.8.2 click-8.1.7 colorama-0.4.6
 itsdangerous-2.2.0
```

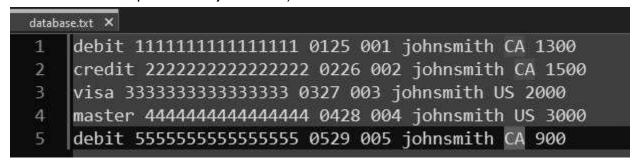
now run app.py to start the program

```
(venv) C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>python app.py
 * Serving Flask app 'app'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on http://127.0.0.1:5000
Press CTRL+C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 184-167-329
```

typing http://localhost:5000/ into the browser will load the website for payment feature



 from here, you can manually test by inputting information as written in database.txt (note that name is written in lower case with no space, this is because program is made to interpret name input as such, for example, "John Smith" will be interpreted as "johnsmith")



• or to run the test case, run the command "python -m unittest discover -s tests"

```
(venv) C:\Users\Sungpoon\Documents\GitHub\Cisc327-GROUP51\Assignment-2\Payment>python -m unittest discover -s test
......
Ran 11 tests in 0.001s
```

(note that 11 tests include both success and fail cases) fail cases are tested by ensuring that no balance is returned if any of the information is incorrect, thus returning an error message on the website