Introduction to Programing Assignment 3	420-LS3-AS Section 06140 Winter 2025	Student Name: Student ID:

This assignment is worth a total of 10% of your final grade.

Requirements:

1. This is an **individual** assignment. Submit your own work!
2. **Do not use ChatGPT, I will know!**
3. Submit your completed work in Omnivox. **Only one** Python source file is needed. Your source file name will be as follows:

   assignment_3.py

4. Use Python comments to include your FULL NAME, Student ID, and Date at the TOP of your source file.
5. Your code MUST BE well organized, structured.
6. Pay attention to how you name variables, functions, etc. Use only ONE style: PascalCase, camelCase, or snake_case. Do not mix styles!

Python keywords used for this assignment and covered in class:

FastAPI → FastAPI provides the proxy to use REST APIs which will connect to and query your MySQL database. https://fastapi.tiangolo.com/

Python Requests Module → This module provides the REST API calls used to communitate to FastAPI: https://www.w3schools.com/python/module_requests.asp

Part 1 – ATM Plus v3 requirements:

1. You will extend the features from v2 by using a database and REST API.
2. Replace ALL code that uses List/Dictionaries to maintain transactions with REST API calls provided in the FastAPI main.py code provided.
3. You do no longer need to have the "5. Display All Historic Transactions." option. You only need to support "4. Display All Current Transactions." which will show all (current and historic) transactions from the database.
4. ALL transactions {balance, history, deposit and withdrawal} must be made using FastAPI.
5. Make sure you also properly detect and handle any database connection error that might occur.
6. Make sure you cannot withdrawal more money than is available.
7. Make sure all output is properly formatted and clean.