Objective: The objective of this lab is to hone your database scripting in Python skills, and to get you used to reading the documentation associated with a package or a library.

Step 1:
Skim the documentation on PyMySQL (specifically the connection object), PassLib (specifically password hashing schemes), and CSV (specifically csv reader).
PyMySQL documentation: https://pymysql.readthedocs.io/en/latest/
PassLib documentation: https://passlib.readthedocs.io/en/stable/lib/index.html
CSV documentation: https://docs.python.org/3/library/csv.html

Step 2:
After reading the documentation, install the required packages. You should already have PyMySQL installed (pip install pymysql).
PassLib is a package you have not seen before so you will need to install it (pip install passlib and pip install argon2_cffi)
CSV is a default package that comes with your Python installation.

Step 3:
From the XAMPP control panel, start Apache and MySQL.

Step 4:
Using IDLE create a new python code file named lab7.

Step 5:
At the very top of the code file you will need to have the following imports
import pymysql
from passlib.hash import argon2
import csv

Step 6:
Establish a connection to your PHPMyAdmin admin UI without selecting a database. After reading the PyMySQL documentation and watching the lecture videos, you should have a sense of all the parameters that pymysql.connect accepts, based on the documentation make sure autocommit = True, when establishing the connection. That saves you from committing manually in the code.

Step 7:
Create a database (if not exists) named ___.
Select the database (look at select_db in the documentation).

Step 8:
Create a table named users (if not exists) in your lab7 database.
Users will have 5 columns (ID TEXT, firstname TEXT, lastname TEXT, email TEXT, password TEXT).
Do not worry about adding a primary key.

Step 9:
Download data.csv and place it in the same directory as your ___.py Python code file.
Read in the data from the csv file (hint: csv = csv.reader(open('data.csv'))
Use a for loop to iterate through the csv and insert all the rows into your users table.
Check that everything was imported correctly via your PHPMyAdmin admin UI.

Step 10:
Now that all the data you need is imported, run a query to select ID and password from users, and fetch all the results.
Iterate over those results using a for loop and update the password for each user using argon2.hash (refer to the PassLib documentation linked in Step 1).