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CSC\_157\_Lab\_012\_QA

**(1) Explain how pickling is used in this application.**

Pickling is used in this application to store a python List type that contains flight data as a binary stream so that it can be kept in secondary storage and read from and interacted with as a Python List type in the application.

**(2) The following block of statements appear in the starter code for this application.**

|  |
| --- |
| **class flights(object) :**  **""" description of class """**  **flightCount = 0**  **def \_\_init\_\_(self, date, time, destination, cost) :** |

**If you had to add an additional parameter to the \_\_init\_\_() method, aside from the date and time, etc., what would you choose as the parameter that would make a class object more " robust " with data.**

I added a “airline” as suggested in the lab writeup to make the object more “robust” with data. If I were going to make a more serious application, perhaps I would add seat availability, links to baggage policies for the airline, gate numbers and other data points to the class properties.

**(3) The following code statement appears in the starter code for this application.**

**pickle.dump(myFlight, open("target.p", "wb"))**

**Explain, in detail, the function / purpose of the above line of code.**

The above line of code uses the “dump” method from the pickle module to write a Python object as a binary stream to a “target.p” file. This line of code will create a “target.p” file if none exists.

**(4) The following code statement appears in the starter code for this application.**

**fl = pickle.load(open("target.p", "rb"))**

**Explain, in detail, the function / purpose of the above line of code.**

The above line of code uses the pickle module to load a pickled target file and read it as a binary stream. The pickled binary stream contains type information as well, so pickle knows to create, for example, a List type object if the binary data was pickled as a List type.

**(5) What have you learned from performing and coding this lab assignment?**

I learned about python’s dateTime library, and used it instead of the suggested standTime function since I was finding problems with that function in certain edge cases, and decided it more worthwhile to reach out for a complete and reliable dateTime library instead of trying to write my own (date/time formatting, timezones, etc. can be such a problem in programming). I also learned a bit more about creating instances of classes (in this case, a list of class instances as flight objects) and reading / parsing them.