

PROGRAMMING FUNDAMENTALS

Lab Experiment #12

OBJECTIVE:

File I/O in Python

TOOLS REQUIRED:

Personal computer with windows and Python installed

DESCRIPTION:

Creating and modifying files in Python is relatively simple as compared to other languages. File I/O makes it possible for a program to store its data permanently on a secondary storage device. In this lab, the students will practice with the file I/O in Python.

Following lab tasks are designed to practice and learn file I/O in Python. Pay attention to the lab instructor who will explain each task and then work your way to complete the tasks.

LAB TASK:

1. Open Python IDLE terminal and then create a new file. Name it “lab12_1.py”. Write a program that allows a user add records in a text file. The program asks the user for a record in the following format:
Name, Phone number and then saves this record with a unique ID. (Starting from 1) in a comma separated format in the file.
2. Create “lab12_2.py” and write a program that implements a small-scale security surveillance system. The program allows the user to enter the name, phone number and then save this information into a visitor log file along with the arrival time information.
3. Create “lab12_3.py”. Write a program that extends the car rental system from Lab no. 7. Use files to store the information about the cars. Moreover, the car rental system should also allow logging of the car rentals in a separate file i.e., saving information (appending) to a file each time a car is rented and updating the information when it is returned.

QUESTIONS:

Q # 1: What is the difference between opening a file in binary or text mode?

Ans.

Q # 2: A file “test.txt” has some data and is stored in the same folder as your script. Write some code to open the file and find a line containing “Total cost:”. Then, from this line, read the numbers after the term “Total cost” and print the information on the screen.

Ans.

Q # 3: Write some to compare two files “file1.dat” and “file2.dat”. The program should print only those lines which are different in both files.

Ans.

Name: _____

Roll #: _____

Date: _____

Remarks:

Subject Teacher