13. PYTHON AND CSV FILES

Learning Objectives

After the completion of this chapter, the student will be able to

- Understand what is CSV?
- Able to import CSV files in python programs.
- Execute and debug python programs.

Important Notes

- A CSV file is a human readable text file where each line has a number of fields, separated by commas or some other delimiter.
- Files saved in excel cannot be opened or edited by text editors.
- **CSV** is a simple **file format** used to store tabular data, such as a spreadsheet or database.
- CSV File cannot store charts or graphs. It stores data but does not contain formatting, formulas, macros, etc.
- A CSV file is also known as a Flat File. Files in the CSV format can be imported to and exported from programs that store data in tables, such as ***Microsoft Excel*** or ***OpenOfficeCalc.***
- The last row begins with two commas because the first two fields of that row were empty in our spreadsheet. Don't delete them — the two commas are

required so that the fields correspond from row to row. They cannot be omitted.

- If both MS Excel and Open Office calc is installed in the computer, by default the CSV file will be opened in MS Excel.
- CSV files have been used extensively in e-commerce applications because they are considered very easy to process.
- File name or the complete path name can be represented either with in “ “ or in ‘ ‘ in the open command.
- The reader function is designed to take each line of the file and make a list of all columns.
- By default “skipinitialspace” has a value false.
- A dialect is a class of csv module which helps to define parameters for reading and writing CSV. It allows you to create, store, and re-use various formatting parameters for your data.
- A list is a data structure in Python that is a mutable, or changeable, ordered sequence of elements.
- List literals are written within square brackets [ ]. Lists work similarly to strings.
- Read a specific column in a csv file and display its result in Descending (Reverse) order.

- list_name.sort() command arranges a list value in ascending order. list_name. sort(reverse) is used to arrange a list in descending order.
- The sorted() method sorts the elements of a given item in a specific order – Ascending or Descending. Sort() method which performs the same way as sorted(). Only difference, sort() method doesn’t return any value and changes the original list itself.
- DictReader() gives OrderedDict by default in its output. An OrderedDict is a dictionary subclass which saves the order in which its contents are added. To remove the OrderedDict use dict().
- The writerow() method writes one row at a time. If you need to write all the data at once you can use writerows() method.
- The ‘w’ write mode creates a new file. If the file is already existing ‘w’ mode over writs it. Whereas ‘a’ append mode add the data at the end of the file if the file already exists otherwise creates a new one.
- writerow() takes 1-dimensional data (one row), and writerows takes 2-dimensional data (multiple rows) to write in a file.
- The dialect parameter skipinitialspace when it is True, whitespace immediately following the delimiter is ignored. The default is False.
- Python’s CSV module only accepts \r\n, \n or \r as line terminator.