

CHAPTER-5 FILE HANDLING

Learning Outcomes: Learn file handling in Python.

INTRODUCTION:

File:- A file is a collection of related data stored in computer storage for future data retrieval.

Stream: - It refers to a sequence of bytes.

File handling refers to reading and writing contents from a file.

Data Files:

Data files can be stored in two ways:

1. **Text Files:** Text files are structured as a sequence of lines, where each line includes a sequence of characters.
2. **Binary Files:** A binary file is any type of file that is not a text file.
3. **CSV Files:** The so-called CSV (Comma Separated Values) format is the most common import and export format for spreadsheets and databases. The `csv` module implements classes to read and write tabular data in CSV format. It allows programmers to say, “write this data in the format preferred by Excel,” or “read data from this file which was generated by Excel,” without knowing the precise details of the CSV format used by Excel.

Difference between Text Files Binary Files

1. Stores information in ASCII characters. Stores information in the same format which the information is held in memory.
2. Each line of text is terminated with a special character known as EOL (End of Line) No delimiters are used for a line.
3. Some internal translations take place when this EOL character is read or written. No translation occurs in binary files.
4. Slower than binary files. Binary files are faster and easier for a program to read and write the text files.

Opening and closing a file:

Opening a file: To work with a file, first of all you have to open the file. To open a file in python, we use `open()` function.

The `open()` function takes two parameters; filename, and mode. `open()` function returns a file object.

Syntax: `file_objectname= open(filename, mode)`

Example:

To open a file for reading it is enough to specify the name of the file: `f = open("book.txt")`

The code above is the same as:

```
f = open("book.txt", "rt")
```

Where "r" for read mode, and "t" for text are the default values, you do not need to specify them.

Closing a file:

After performing the operations, the file has to be closed. For this, a `close()` function is used to close a file.

Syntax: `file-objectname.close()`

#WRITING IN A FILE _____ OPENING A FILE

```
f_out=open("D:anki.txt","w")
```

```
print(f_out.write("HIII i am learning filehandling"))
```

```
f_out.close()
```

#READING IN A FILE _____ OPENING A FILE

```
f_in=open("D:anki.txt","r")
```

```
print(f_in.read())
```

```
f_in.close()
```

N.B: THIS SHEET IS PREPARED FROM HOME.