csv file

* csv file open with file object/pointer →

Method-1 : file object + open () →

$$fobj = open ('story.csv', 'r', new line =' ')$$

↓   ↓   ↓   ↓

file object   csv file   access   optional
                               mode

Method-2 : with + open () + as + file object →

with   open ('story.csv', 'r')   as   fobj :

↓   file
                                         object

statement   csv   access
                      file   mode

                                   keyword

function

* csv file — Access Mode →

    r → read mode, file pointer at begining of file

    a → append mode, file pointer at end
        of file

    w → write mode, file pointer at start/
        begining of file

    * by default access mode - r (read mode)

csv file - write operation

csv module - functions for write operation →
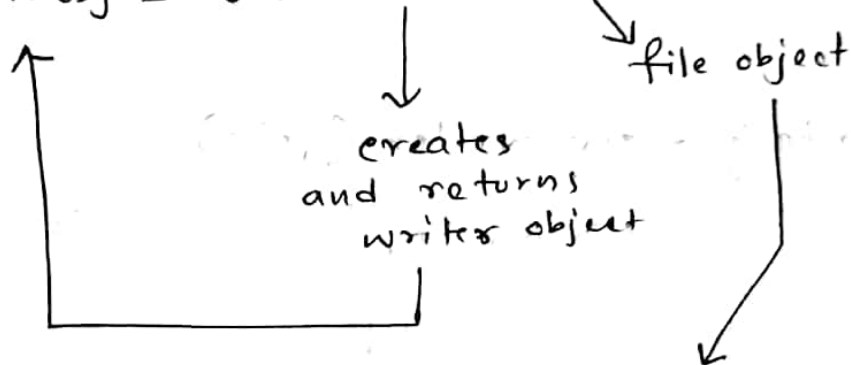
(i) writer ()
(ii) writerow ()
(iii) writerows ()

(i) writer () = function creates and returns a writer object to program in python

     * writer object writes a list/record/row into csv file

code - writeobj = csv. writer (fobj)

↓ file object

creates and returns writer object

     * writer () - function takes file object as input/parameter

(ii) writerow () - function writes a single row/record/ list into csv file at a time by writer object

code - ① writeobj . writerow (['John', 23, 79])

     ② L = ['John', 23, 79]
     writeobj . writerow (L)

∴ FULL CODE - WRITE A SINGLE LIST/RECORD/ROW →

     writeobj = csv. writer (fobj)
     writeobj . writerow (['John', 23,79])

(iii) writerows () - function writes multiple rows/records /lists (of a nested list) into csv file at a time by writer object

Code- $L = \left[[36, 'John', 97], [37, 'Arnold', 87], [38, 'Nick', 83] \right]$

write obj . writerows $\left(L \right)$

∴ FULL CODE - TO WRITE MULTIPLE LISTS/RECORDS/ ROWS - in csv file →

Method-1:

$L = \left[\; [[36, 'John', 97]] \; , [37, 'Arnold', 87], \right.$
$\left. [38, 'Nick', 83]] \right]$

writeobj = csv. writer (fobj)

writeobj . writerows (L)

Method-2:

writeobj = csv. writer (fobj)

L = [ ]

for i in range (5): #i → $\overbrace{0, 1, 2, 3, 4}$, 5-loop breaks

    roll = int (input ("enter roll : "))

    name = input ("enter name : "))

    mark = int (input ("enter mark : "))

    rec = [roll, name, mark]

    L. append (rec)

writeobj . writerows (L)

csv file - write operation, append operation

8,1, Create a csv file book.csv and write multiple rows/records in csv file book.csv (lists)

Method-1:

```
import csv

def csvFileWrite():
    fobj = open('book.csv', 'w')
    cw = csv.writer(fobj)
    cw.writerow(['Roll', 'Name', 'Mark'])
    cw.writerow([32, 'John', 97])
    cw.writerow([33, 'Arnold', 87])
    cw.writerow([34, 'Albert', 74])
    fobj.close()

csvFileWrite()
```

Method-2:

```
import csv

def csvFileWrite():
    with open('book.csv', 'w') as fobj:
        cw = csv.writer(fobj)
        cw.writerow(['Roll', 'Name', 'Mark'])
        cw.writerow([32, 'John', 97])
        cw.writerow([33, 'Arnold', 87])
        cw.writerow([34, 'Albert', 74])

csvFileWrite()
```

Q.2 Create a csv file student.csv and write multiple records/rows into the file:

CSV File

1, John, XII, A

2, Arnold, XII, A

3, Albert, XII, A

4, William, XII, A

5, Mathews, XII, A

Method-1:

```python
import csv

def createCSV():
    fobj = open('student.csv', 'w', newline='')
    stw = csv.writer(fobj)
    L = []
    heading = ['Roll', 'Name', 'Class', 'Sec']
    L.append(heading)

    for i in range(5):
        roll = int(input("Enter Roll: "))
        name = input("Input Name: ")
        class = input("Input Class: ")
        sec = input("Enter Section: ")

        rec = [roll, name, class, sec]

        L.append(rec)

    stw.writerows(L)
    fobj.close()

createCSV()
```

Method-2 :

```
import csv
def    create CSV():
        with open('student.csv', 'w', newline='') as fobj:
            stw = csv.writer(fobj)
            L = []
            heading = ['Roll', 'Name', 'Class', 'Sec']
            L.append(heading)

            for i in range(5):
                roll = int(input("Enter Roll:"))
                name = input("Enter Name :")
                class = input("Enter class:")
                sec = input("Enter Sections")

                rec = [roll, name, class, sec]
                L.append(rec)

            stw.writerows(L)

create CSV()
```