Class XII: Python Data File Handling 16

Question:1
Python program to create a CSV file named “student.csv”, to store Roll,Name and Per of students.
Sol:

```
#writing records in csv file
import csv
fh=open('student.csv','w',newline='')
stuwriter=csv.writer(fh)
stuwriter.writerow(['Rollno','Name','Marks']) # write header row
sturec= [ ['101', 'Nikhil', '99'],
['102', 'Sanchit', '98'],
['103', 'Aditya', '98'],
['104', 'Sagar', '87'],
['105', 'Prateek', '88'],
]
for i in sturec:
stuwriter.writerow(i)
fh.close()
#writing records in csv file import csv fh=open('student.csv','w',newline='')
stuwriter=csv.writer(fh) stuwriter.writerow(['Rollno','Name','Marks']) # write
header row sturec= [ ['101', 'Nikhil', '99'], ['102', 'Sanchit', '98'], ['103', 'Aditya',
```

'98'], ['104', 'Sagar', '87'], ['105', 'Prateek', '88'],] for i in sturec:
stuwriter.writerow(i) fh.close()

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#writing records in csv file
import csv
fh=open('student.csv','w',newline='')
stuwriter=csv.writer(fh)
stuwriter.writerow(['Rollno','Name','Marks']) # write header row
sturec= [ ['101', 'Nikhil', '99'],
     ['102', 'Sanchit', '98'],
     ['103', 'Aditya', '98'],
     ['104', 'Sagar', '87'],
     ['105', 'Prateek', '88'],
       ]
for i in sturec:
    stuwriter.writerow(i)
fh.close()
```

After the execution of the above file, a csv file named “student.csv” gets created. It is an excel file.

Question:2
Python program read the contents of CSV file named “student.csv”, and display Roll,Name and Per of students.
Sol:

```
# method 1
import csv
with open("student.csv","r",newline='\n') as fh:
sreader=csv.reader(fh)
```

for rec in sreader:
print(rec)
#method 2
with open("student.csv","r",newline='\n') as fh:
sreader=csv.reader(fh)
for rec in sreader:
for i in rec:
print(i,end=' ')
print('\n')
# method 1 import csv with open("student.csv","r",newline='\n') as fh: sreader=csv.reader(fh) for rec in sreader: print(rec) #method 2 with open("student.csv","r",newline='\n') as fh: sreader=csv.reader(fh) for rec in sreader: for i in rec: print(i,end=' ') print('\n')

```
# method 1
import csv
with open("student.csv","r",newline='\n') as fh:
    sreader=csv.reader(fh)
    for rec in sreader:
        print(rec)
#method 2
with open("student.csv","r",newline='\n') as fh:
    sreader=csv.reader(fh)
    for rec in sreader:
        for i in rec:
            print(i,end=' ')
        print('\n')
```

Output:

['Rollno', 'Name', 'Marks']
['101', 'Nikhil', '99']
['102', 'Sanchit', '98']
['103', 'Aditya', '98']
['104', 'Sagar', '87']
['105', 'Prateek', '88']
Rollno Name Marks
101 Nikhil 99
102 Sanchit 98
103 Aditya 98
104 Sagar 87

105 Prateek 88
>>>
['Rollno', 'Name', 'Marks'] ['101', 'Nikhil', '99'] ['102', 'Sanchit', '98'] ['103', 'Aditya', '98'] ['104', 'Sagar', '87'] ['105', 'Prateek', '88'] Rollno Name Marks 101 Nikhil 99 102 Sanchit 98 103 Aditya 98 104 Sagar 87 105 Prateek 88 >>>

```
['Rollno', 'Name', 'Marks']
['101', 'Nikhil', '99']
['102', 'Sanchit', '98']
['103', 'Aditya', '98']
['104', 'Sagar', '87']
['105', 'Prateek', '88']
Rollno Name Marks

101 Nikhil 99

102 Sanchit 98

103 Aditya 98

104 Sagar 87

105 Prateek 88

>>>
```

Question:3

Python program to create a CSV file, to store Name, Branch, Year and CGPA of student.

Sol:

```
#csv1
#to create a csv file
# importing the csv module
import csv
# field names
fields = ['Name', 'Branch', 'Year', 'CGPA']
# data rows of csv file
rows = [ ['Nikhil', 'CSE', '2', '9.0'],
['Sanchit', 'CSE', '2', '9.1'],
['Aditya', 'IT', '2', '9.3'],
```

['Sagar', 'SE', '1', '9.5'],
['Prateek', 'MCE', '3', '7.8'],
['Sahil', 'EC', '2', '9.1']]
# name of csv file
filename = "university_records.csv"
# writing to csv file
with open(filename, 'w') as csvfile:
# creating a csv writer object
csvwriter = csv.writer(csvfile)
# writing the fields
csvwriter.writerow(fields)
# writing the data rows
csvwriter.writerows(rows)
#csv1 #to create a csv file # importing the csv module import csv # field names fields = ['Name', 'Branch', 'Year', 'CGPA'] # data rows of csv file rows = [['Nikhil', 'CSE', '2', '9.0'], ['Sanchit', 'CSE', '2', '9.1'], ['Aditya', 'IT', '2', '9.3'], ['Sagar', 'SE', '1', '9.5'], ['Prateek', 'MCE', '3', '7.8'], ['Sahil', 'EC', '2', '9.1']] # name of csv file filename = "university_records.csv" # writing to csv file with open(filename, 'w') as csvfile: # creating a csv writer object csvwriter = csv.writer(csvfile) # writing the fields csvwriter.writerow(fields) # writing the data rows csvwriter.writerows(rows)

```
#csv1
#to create a csv file

# importing the csv module
import csv

# field names
fields = ['Name', 'Branch', 'Year', 'CGPA']

# data rows of csv file
rows = [ ['Nikhil', 'CSE', '2', '9.0'],
        ['Sanchit', 'CSE', '2', '9.1'],
        ['Aditya', 'IT', '2', '9.3'],
        ['Sagar', 'SE', '1', '9.5'],
        ['Prateek', 'MCE', '3', '7.8'],
        ['Sahil', 'EC', '2', '9.1']]

# name of csv file
```

```
filename = "university_records.csv"

# writing to csv file
with open(filename, 'w') as csvfile:
    # creating a csv writer object
    csvwriter = csv.writer(csvfile)

    # writing the fields
    csvwriter.writerow(fields)

    # writing the data rows
    csvwriter.writerows(rows)
```

After the execution of the above file, a csv file named "university_records.csv" gets created. It is an excel file.

Question:4

Python program read the contents of CSV file named "student.csv", and display Name, Branch, Year and CGPA of students.

Sol:

```
# importing csv module
import csv
# csv file name
#filename = "aapl.csv"
filename = "university_records.csv"
# initializing the titles and rows list
fields = []
rows = []
# reading csv file
with open(filename, 'r') as csvfile:
# creating a csv reader object
csvreader = csv.reader(csvfile)
# extracting field names through first row
fields = next(csvreader)
# extracting each data row one by one
for row in csvreader:
rows.append(row)
# get total number of rows
print("Total no. of rows: %d"%(csvreader.line_num))
```

```
# printing the field names
print('Field names are:' + ', '.join(field for field in fields))
# printing first 5 rows
print('\nFirst 15 rows are:\n')
for row in rows[:15]:
# parsing each column of a row
for col in row:
print(col,end=' ')
print('\n')
# importing csv module import csv # csv file name #filename = "aapl.csv"
filename = "university_records.csv" # initializing the titles and rows list fields = []
rows = [] # reading csv file with open(filename, 'r') as csvfile: # creating a csv
reader object csvreader = csv.reader(csvfile) # extracting field names through first
row fields = next(csvreader) # extracting each data row one by one for row in
csvreader: rows.append(row) # get total number of rows print("Total no. of rows:
%d"%(csvreader.line_num)) # printing the field names print('Field names are:' + ',
'.join(field for field in fields)) # printing first 5 rows print('\nFirst 15 rows are:\n')
for row in rows[:15]: # parsing each column of a row for col in row:
print(col,end=' ') print('\n')
# importing csv module
import csv

# csv file name
#filename = "aapl.csv"
filename = "university_records.csv"

# initializing the titles and rows list
fields = []
rows = []

# reading csv file
with open(filename, 'r') as csvfile:
    # creating a csv reader object
    csvreader = csv.reader(csvfile)

    # extracting field names through first row
    fields = next(csvreader)

    # extracting each data row one by one
```

```
    for row in csvreader:
        rows.append(row)

    # get total number of rows
    print("Total no. of rows: %d"%(csvreader.line_num))

# printing the field names
print('Field names are:' + ', '.join(field for field in fields))

# printing first 5 rows
print('\nFirst 15 rows are:\n')
for row in rows[:15]:
    # parsing each column of a row
    for col in row:
        print(col,end=' ')
    print('\n')
```

Output:

Total no. of rows: 14
Field names are:Name, Branch, Year, CGPA
First 15 rows are:
Nikhil CSE 2 9.0
Sanchit CSE 2 9.1
Aditya IT 2 9.3
Sagar SE 1 9.5
Prateek MCE 3 7.8
Sahil EC 2 9.1
>>>

Total no. of rows: 14 Field names are:Name, Branch, Year, CGPA First 15 rows are: Nikhil CSE 2 9.0 Sanchit CSE 2 9.1 Aditya IT 2 9.3 Sagar SE 1 9.5 Prateek MCE 3 7.8 Sahil EC 2 9.1 >>>

```
Total no. of rows: 14
Field names are:Name, Branch, Year, CGPA

First 15 rows are:



Nikhil CSE 2 9.0



Sanchit CSE 2 9.1



Aditya IT 2 9.3



Sagar SE 1 9.5



Prateek MCE 3 7.8



Sahil EC 2 9.1



>>>
```