

Chapter 5: File Handling

Writing into Files:

Like *reading* functions, the *writing* function for data files are also work on *opened files*, i.e., the files that are opened and linked via a *file-object or file-handle*.

Python Data Files – Writing Functions

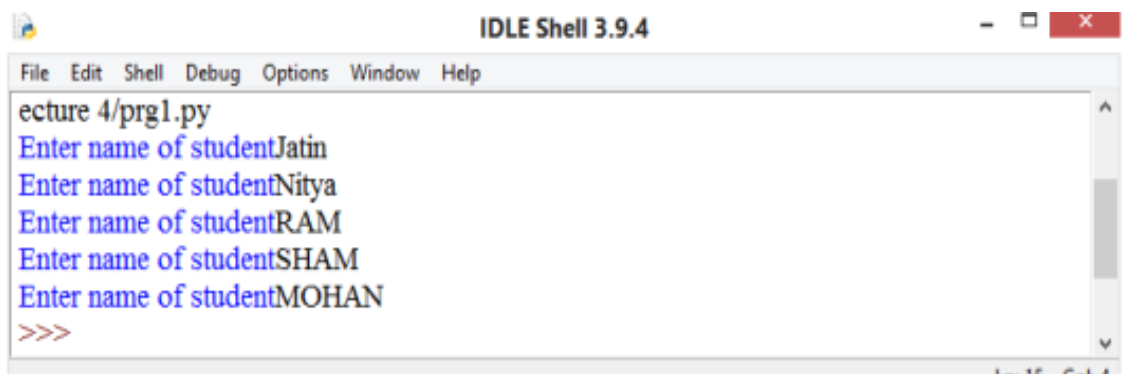
S.No.	Name	Syntax	Description
1.	write()	<filehandle>.write(str1)	Writes string str1 to file referenced by <filehandle>
2.	Writelines()	<filehandle>.writelines(L)	Writes all strings in list as lines to file referenced by <filehandle>
The <filehandle> in above syntaxes is the file-object holding open file's reference			

Example 1:

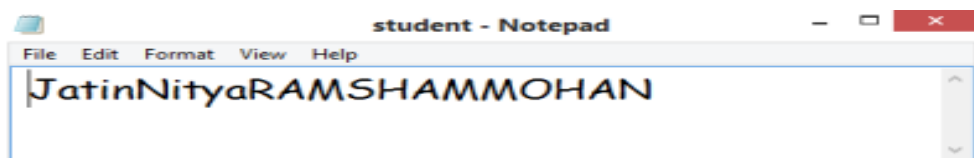
#Prg. 1: Create a file to hold / write some data (Using write())

```
fileout = open(r"E:\textfiles\student.dat", "w")
for i in range(5):
    name=input("Enter name of student")
    fileout.write(name)
fileout.close()
```

Output:



The contents of the created file will be:



Note:

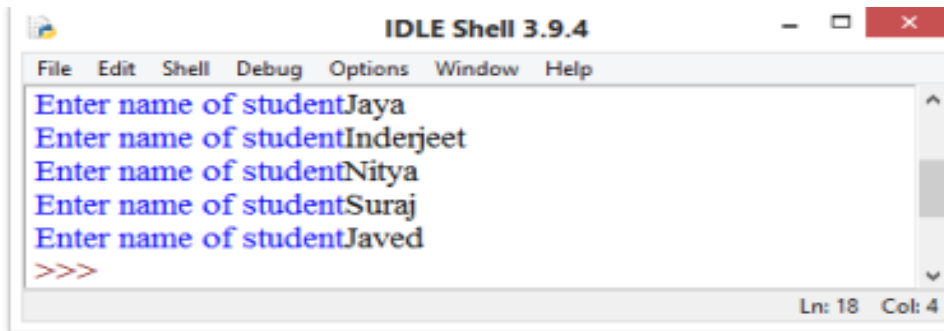
*The **write()** does not add any extra character like newline character ('\n') after every write operation. Thus to group the contents line wise, we have to write newline characters after each write statement / operation.*

Example2:

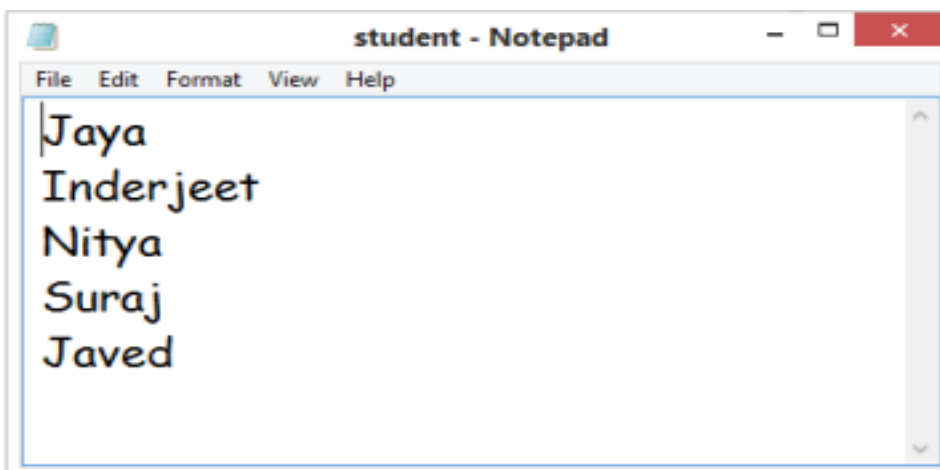
#Prg. 2: Create a file to hold / write some data (Using write())

```
fileout = open(r"E:\textfiles\student.dat", "w")
for i in range(5):
    name=input("Enter name of student")
    fileout.write(name)
    fileout.write("\n")
fileout.close()
```

Output:



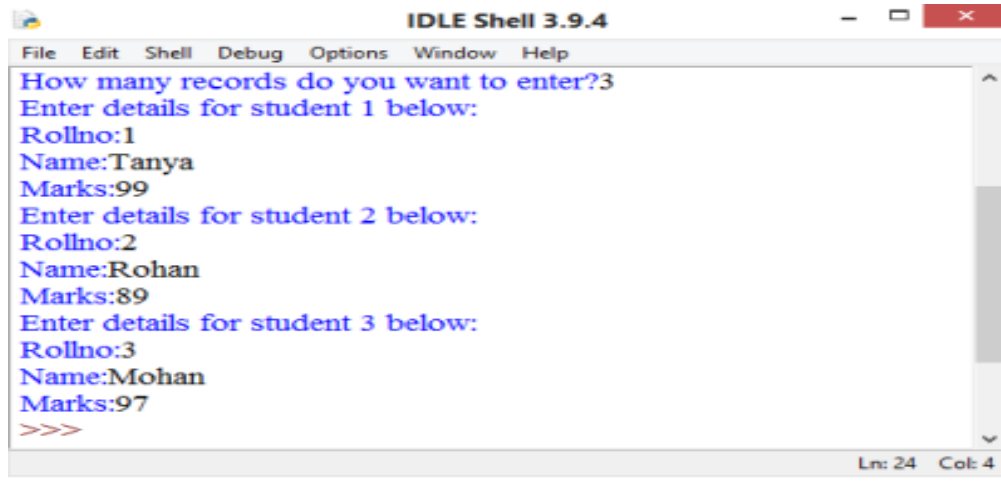
The contents of the created file will be:



#Prg. 3: Write a program to get roll numbers, names and marks of the students of a class and store these details in a file called "Marks.det".

```
count=int(input("How many records do you want to enter?"))
fileout=open("Marks.det", "w")
for i in range(count):
    print("Enter details for student",(i+1),"below:")
    rollno=int(input("Rollno:"))
    name=input("Name:")
    marks=float(input("Marks:"))
    rec=str(rollno)+","+name+","+str(marks)+"\n"
    fileout.write(rec)
fileout.close()
```

Output:

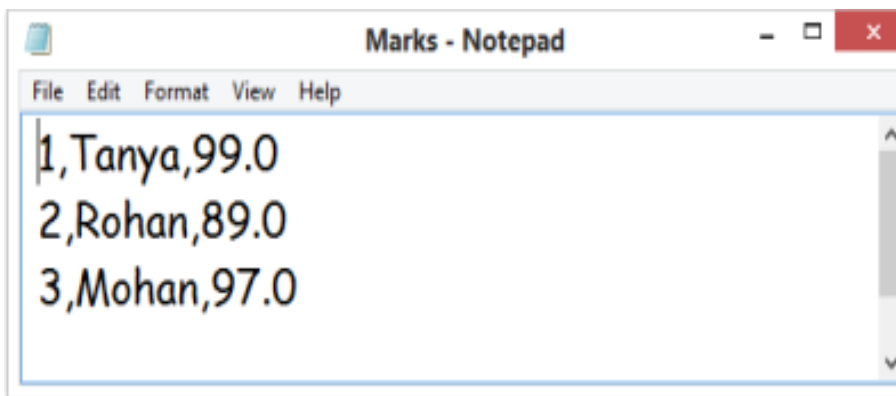


The screenshot shows the IDLE Shell 3.9.4 window. The output text is as follows:

```
How many records do you want to enter?3
Enter details for student 1 below:
Rollno:1
Name:Tanya
Marks:99
Enter details for student 2 below:
Rollno:2
Name:Rohan
Marks:89
Enter details for student 3 below:
Rollno:3
Name:Mohan
Marks:97
>>>
```

The status bar at the bottom right indicates 'Ln: 24 Col: 4'.

The contents of the created file ("marks.det") will be:



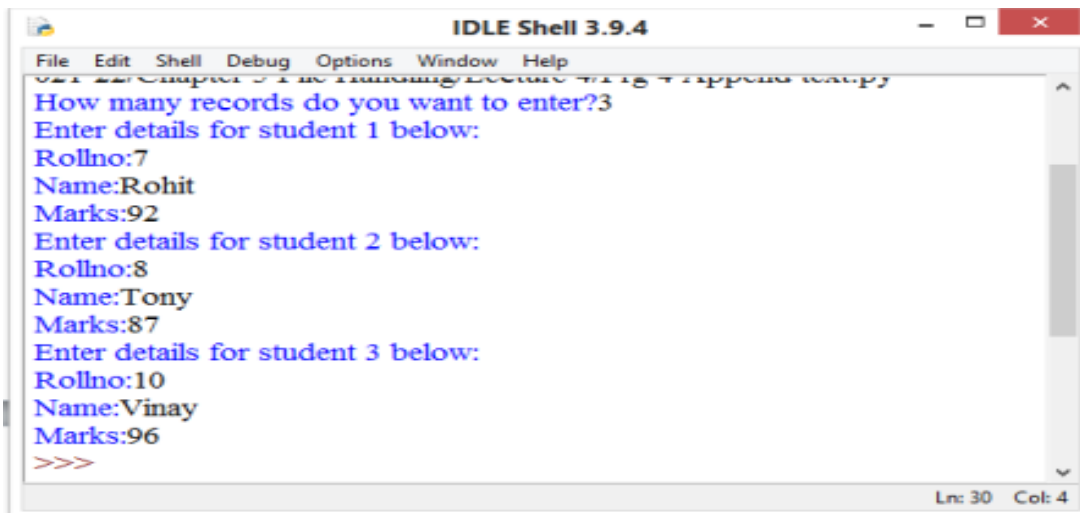
The screenshot shows a Notepad window titled 'Marks - Notepad'. The text inside the window is:

```
1,Tanya,99.0
2,Rohan,89.0
3,Mohan,97.0
```

#Prg.4: Write a program to add two more students' details to the file "marks.det"

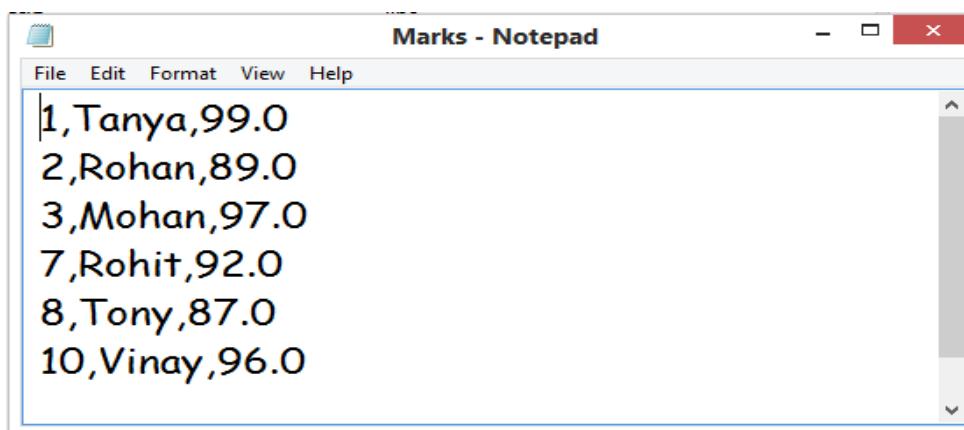
```
count=int(input("How many records do you want to enter?"))
fileout=open("Marks.det", "a")
for i in range(count):
    print("Enter details for student",(i+1),"below:")
    rollno=int(input("Rollno:"))
    name=input("Name:")
    marks=float(input("Marks:"))
    rec=str(rollno)+","+name+","+str(marks)+'\n'
    fileout.write(rec)
fileout.close()
```

Output:

A screenshot of the IDLE Shell 3.9.4 window. The window has a menu bar with File, Edit, Shell, Debug, Options, Window, and Help. The main text area shows the following output in blue text: "How many records do you want to enter?3", "Enter details for student 1 below:", "Rollno:7", "Name:Rohit", "Marks:92", "Enter details for student 2 below:", "Rollno:8", "Name:Tony", "Marks:87", "Enter details for student 3 below:", "Rollno:10", "Name:Vinay", "Marks:96", and ">>>". The status bar at the bottom right shows "Ln: 30 Col: 4".

```
How many records do you want to enter?3
Enter details for student 1 below:
Rollno:7
Name:Rohit
Marks:92
Enter details for student 2 below:
Rollno:8
Name:Tony
Marks:87
Enter details for student 3 below:
Rollno:10
Name:Vinay
Marks:96
>>>
```

The contents of the created file (“marks.det”) will be:

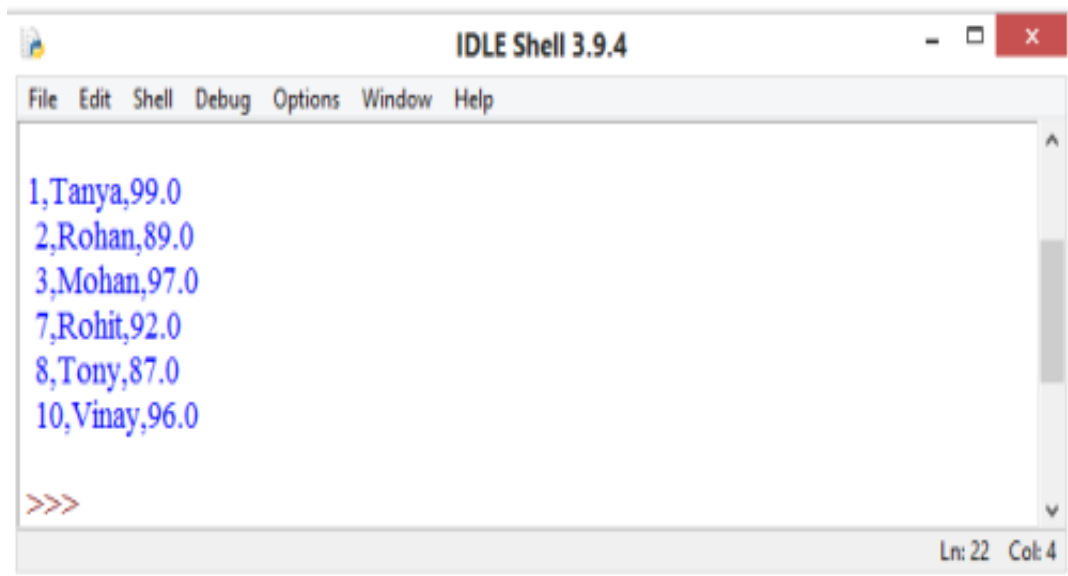
A screenshot of the Notepad window titled "Marks - Notepad". The window has a menu bar with File, Edit, Format, View, and Help. The main text area contains the following text: "1,Tanya,99.0", "2,Rohan,89.0", "3,Mohan,97.0", "7,Rohit,92.0", "8,Tony,87.0", and "10,Vinay,96.0".

```
1,Tanya,99.0
2,Rohan,89.0
3,Mohan,97.0
7,Rohit,92.0
8,Tony,87.0
10,Vinay,96.0
```

#Prg. 5: Program to display the contents of file “marks.det” through program”

```
filein=open("Marks.det", "r")
Str=" "
print()
while Str:
    Str=filein.readline()
    print(Str,end=' ')
filein.close()
```

Output:



The screenshot shows a window titled "IDLE Shell 3.9.4" with a menu bar (File, Edit, Shell, Debug, Options, Window, Help) and a text area containing the following output:

```
1,Tanya,99.0  
2,Rohan,89.0  
3,Mohan,97.0  
7,Rohit,92.0  
8,Tony,87.0  
10,Vinay,96.0  
  
>>>
```

The status bar at the bottom right indicates "Ln: 22 Col: 4".