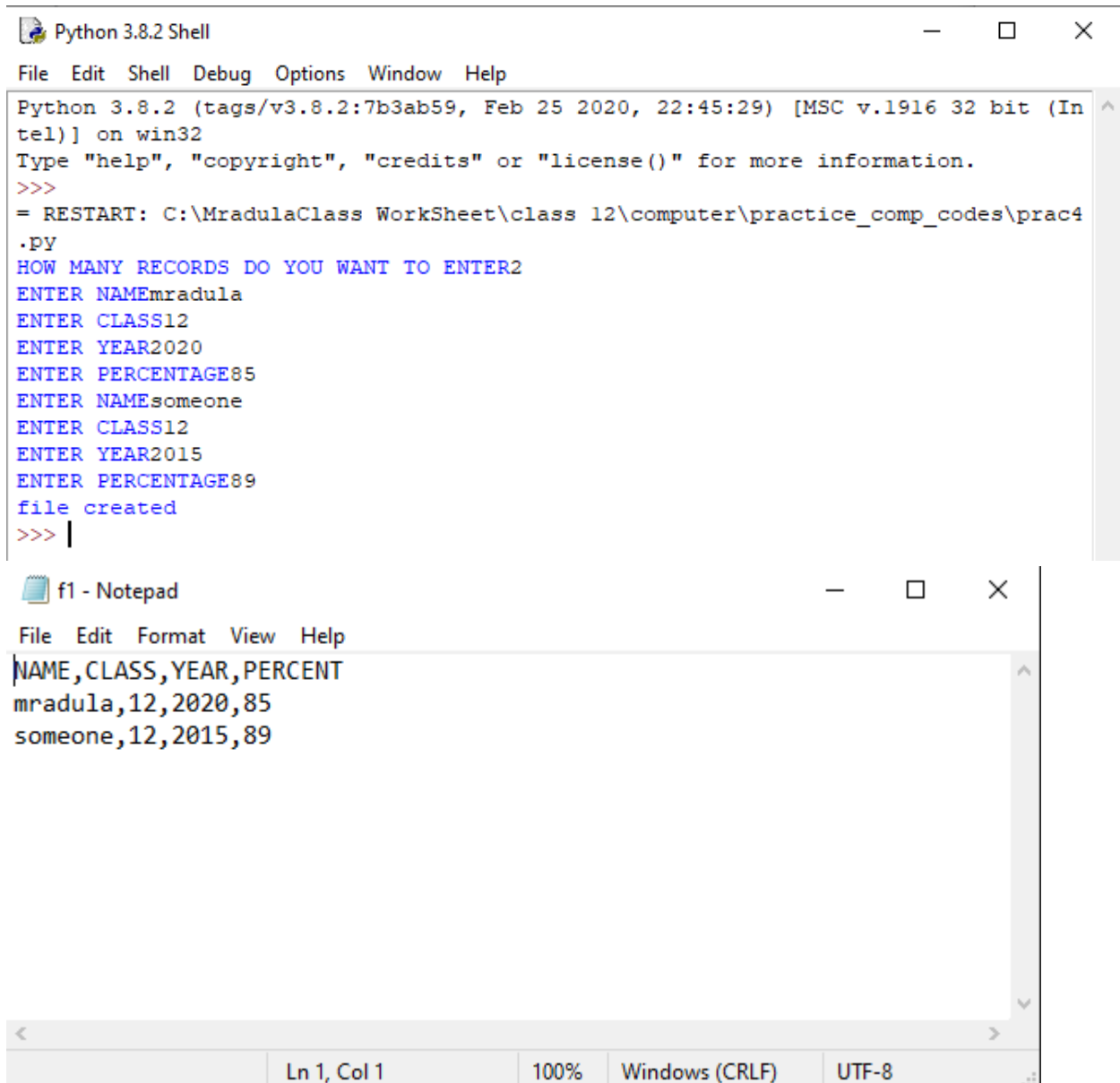


# CSV FILE HANDLING

- Writing in csv with delimiter

```
import csv
f=['NAME','CLASS','YEAR','PERCENT']
with open('f1.csv','w',newline='') as fobj:
    csv_w=csv.writer(fobj,delimiter=',')
    csv_w.writerow(f)
    num=int(input("HOW MANY RECORDS DO YOU WANT TO ENTER"))
    for i in range(num):
        nm=input("ENTER NAME")
        cl=input("ENTER CLASS")
        yr=input("ENTER YEAR")
        pr=input("ENTER PERCENTAGE")
        l=[nm,cl,yr,pr]
        csv_w.writerow(l)
    print("file created")
```



The image shows two windows from a Windows operating system. The top window is titled "Python 3.8.2 Shell" and displays the execution of a Python script. The script prompts the user for the number of records to enter (2), then for each record, it asks for a name, class, year, and percentage. The inputs provided are: Name: mradula, Class: 12, Year: 2020, Percentage: 85; and Name: someone, Class: 12, Year: 2015, Percentage: 89. The script then prints "file created". The bottom window is titled "f1 - Notepad" and shows the contents of the file "f1.csv". The file contains two lines of CSV data: "NAME,CLASS,YEAR,PERCENT" and "mradula,12,2020,85", followed by "someone,12,2015,89".

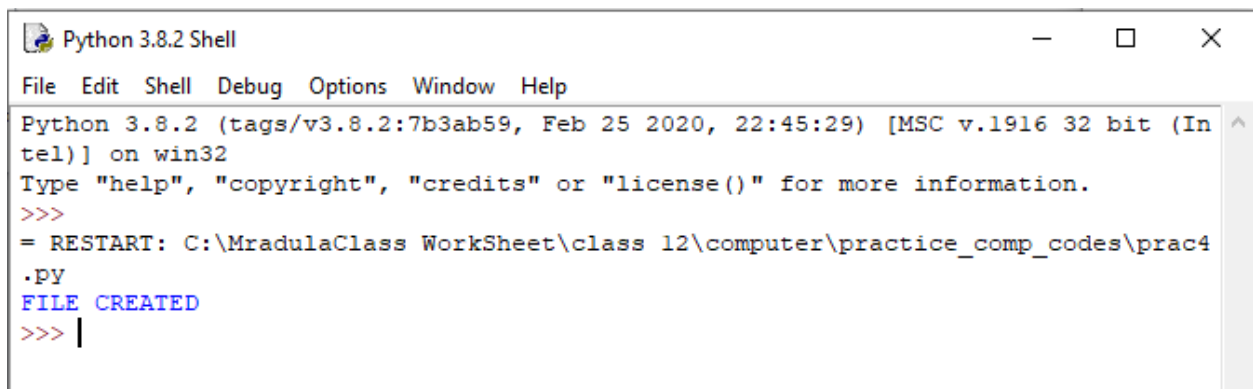
```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice_comp_codes\prac4
.py
HOW MANY RECORDS DO YOU WANT TO ENTER2
ENTER NAMEmradula
ENTER CLASS12
ENTER YEAR2020
ENTER PERCENTAGE85
ENTER NAMEsomeone
ENTER CLASS12
ENTER YEAR2015
ENTER PERCENTAGE89
file created
>>> |
```

```
f1 - Notepad
File Edit Format View Help
NAME,CLASS,YEAR,PERCENT
mradula,12,2020,85
someone,12,2015,89
```

Ln 1, Col 1    100%    Windows (CRLF)    UTF-8

- Writing in csv list of lists

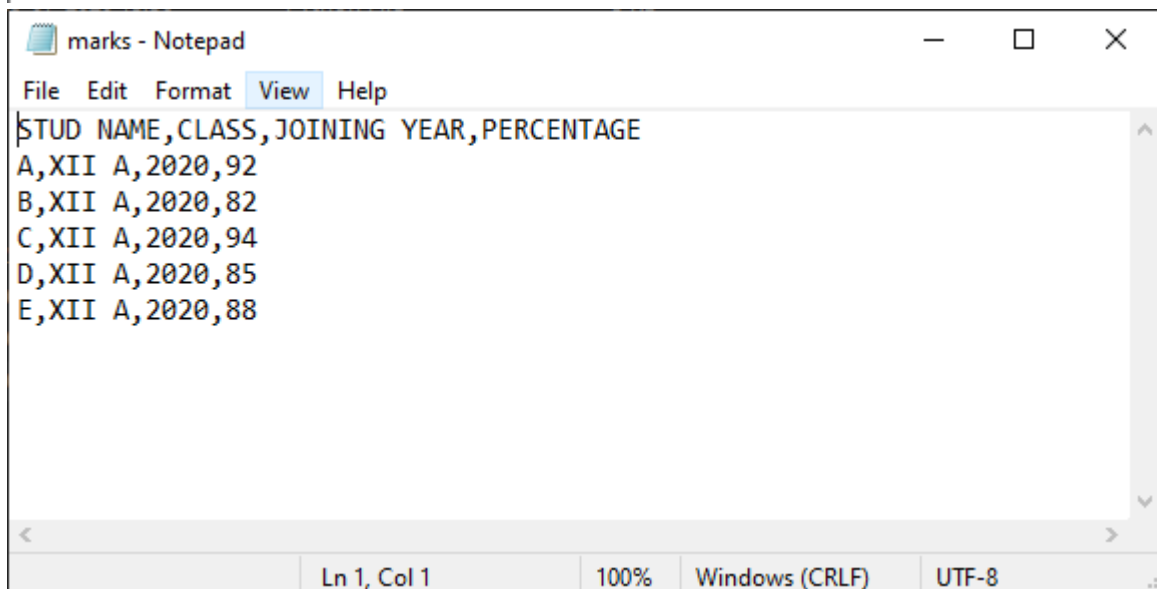
```
import csv
fi=['STUD NAME','CLASS','JOINING YEAR','PERCENTAGE']
r=[
    ['A','XII A','2020','92'],
    ['B','XII A','2020','82'],
    ['C','XII A','2020','94'],
    ['D','XII A','2020','85'],
    ['E','XII A','2020','88']
]
fname='marks.csv'
with open(fname,'w',newline='') as f:
    csv_w=csv.writer(f,delimiter=',')
    csv_w.writerow(fi)
    for x in r:
        csv_w.writerow(x)
print("FILE CREATED")
```



Python 3.8.2 Shell

File Edit Shell Debug Options Window Help

Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>>  
= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice\_comp\_codes\prac4  
.PY  
FILE CREATED  
>>> |



marks - Notepad

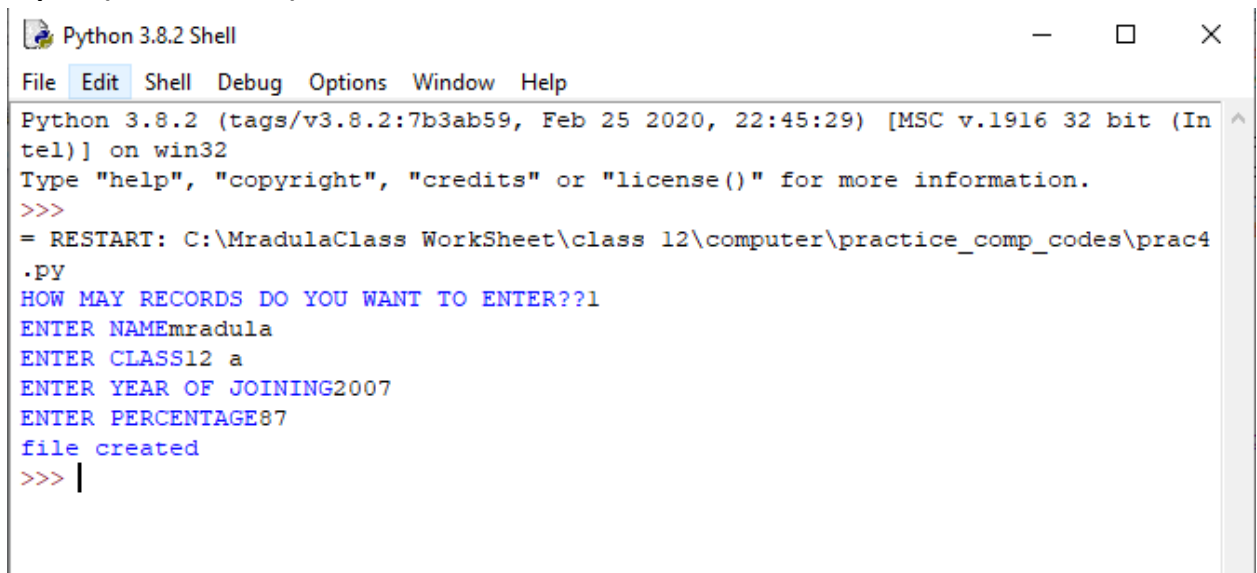
File Edit Format View Help

STUD NAME,CLASS,JOINING YEAR,PERCENTAGE  
A,XII A,2020,92  
B,XII A,2020,82  
C,XII A,2020,94  
D,XII A,2020,85  
E,XII A,2020,88

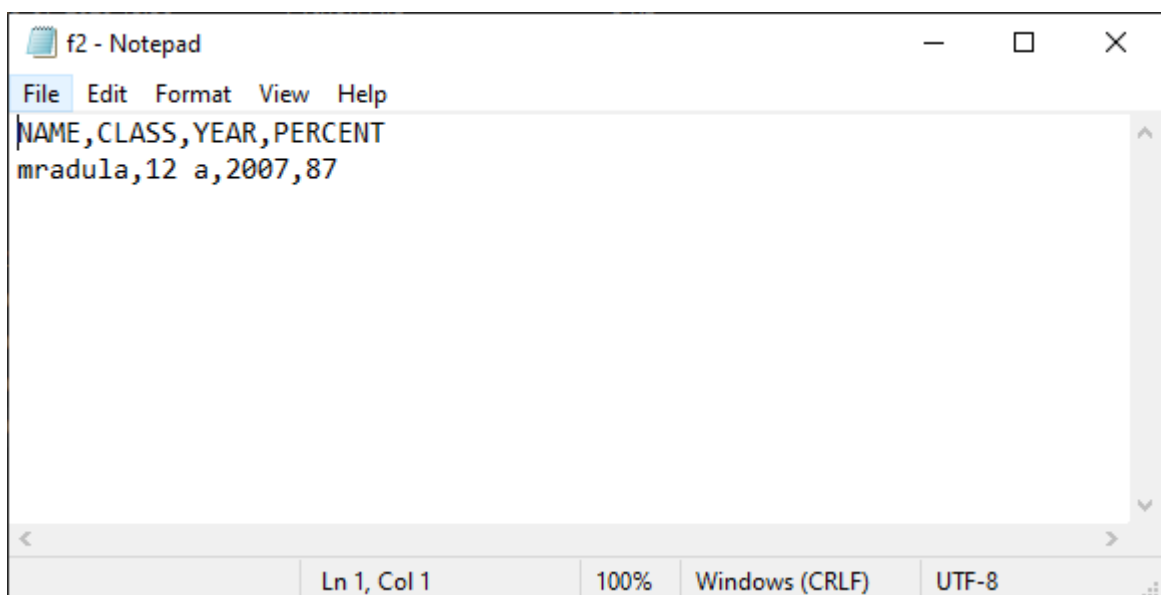
Ln 1, Col 1 100% Windows (CRLF) UTF-8

- Writing in csv without delimiter

```
import csv
f=['NAME','CLASS','YEAR','PERCENT']
with open ("f2.csv",'w',newline=") as fobj:
    csv_w=csv.writer(fobj)
    csv_w.writerow(f)
    num=int(input("HOW MAY RECORDS DO YOU WANT TO ENTER??"))
    for i in range(num):
        nm=input("ENTER NAME")
        cl=input("ENTER CLASS")
        yr=input("ENTER YEAR OF JOINING")
        pr=input("ENTER PERCENTAGE")
        l=[nm,cl,yr,pr]
        csv_w.writerow(l)
    print("file created")
```



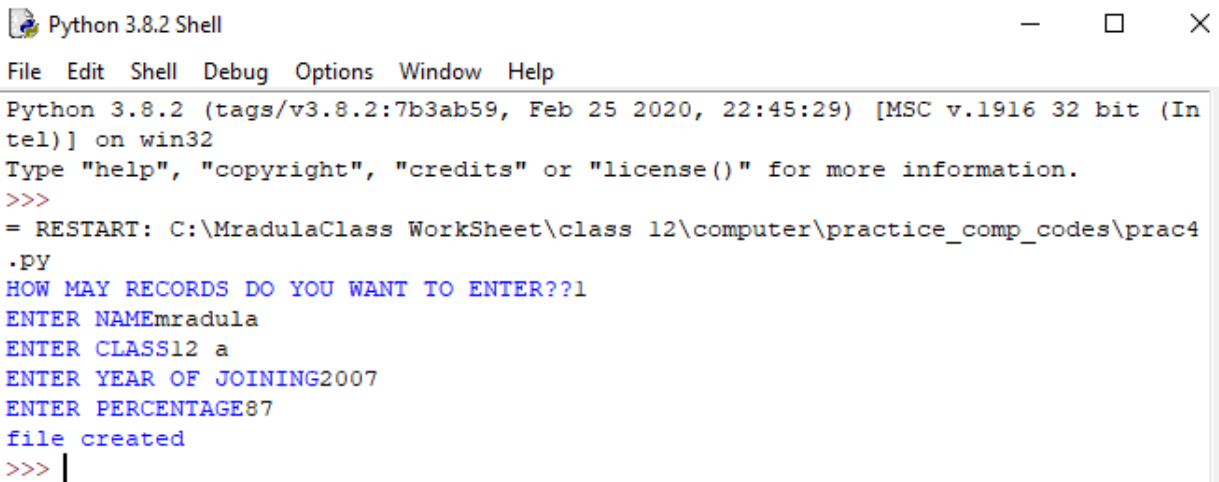
```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice_comp_codes\prac4
.py
HOW MAY RECORDS DO YOU WANT TO ENTER??1
ENTER NAMEmradula
ENTER CLASS12 a
ENTER YEAR OF JOINING2007
ENTER PERCENTAGE87
file created
>>> |
```



```
f2 - Notepad
File Edit Format View Help
NAME,CLASS,YEAR,PERCENT
mradula,12 a,2007,87
```

- Writing in csv with delimiter as '|'

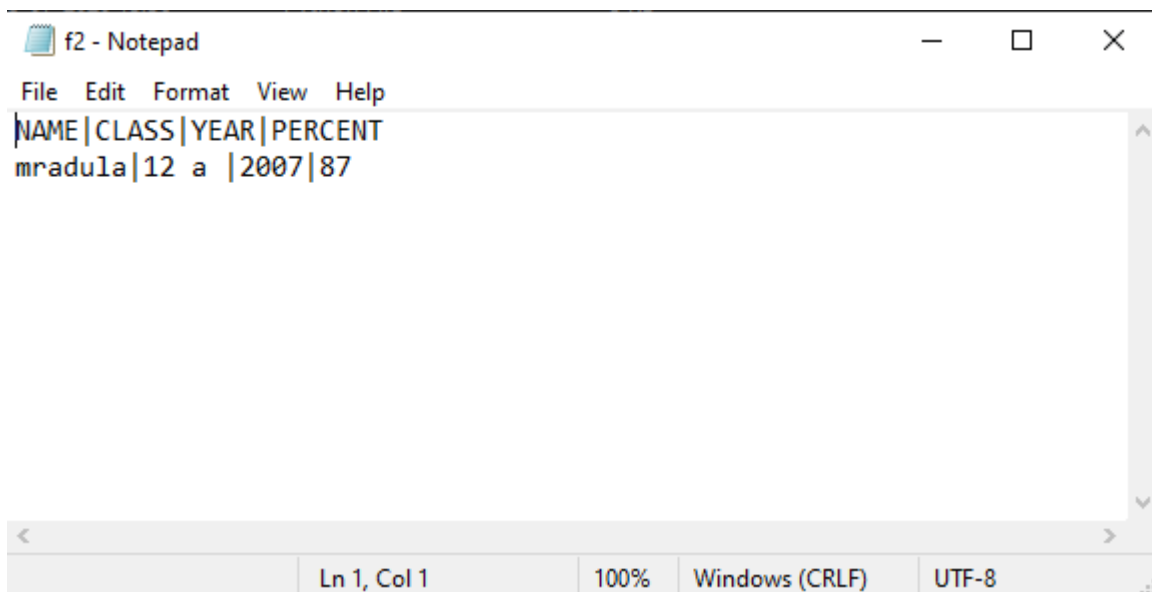
```
import csv
f=['NAME','CLASS','YEAR','PERCENT']
with open ("f2.csv",'w',newline="") as fobj:
    csv_w=csv.writer(fobj,delimiter='|')
    csv_w.writerow(f)
    num=int(input("HOW MAY RECORDS DO YOU WANT TO ENTER??"))
    for i in range(num):
        nm=input("ENTER NAME")
        cl=input("ENTER CLASS")
        yr=input("ENTER YEAR OF JOINING")
        pr=input("ENTER PERCENTAGE")
        l=[nm,cl,yr,pr]
        csv_w.writerow(l)
    print("file created")
```



Python 3.8.2 Shell

File Edit Shell Debug Options Window Help

Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>>  
= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice\_comp\_codes\prac4  
.PY  
HOW MAY RECORDS DO YOU WANT TO ENTER??1  
ENTER NAMEmradula  
ENTER CLASS12 a  
ENTER YEAR OF JOINING2007  
ENTER PERCENTAGE87  
file created  
>>> |



f2 - Notepad

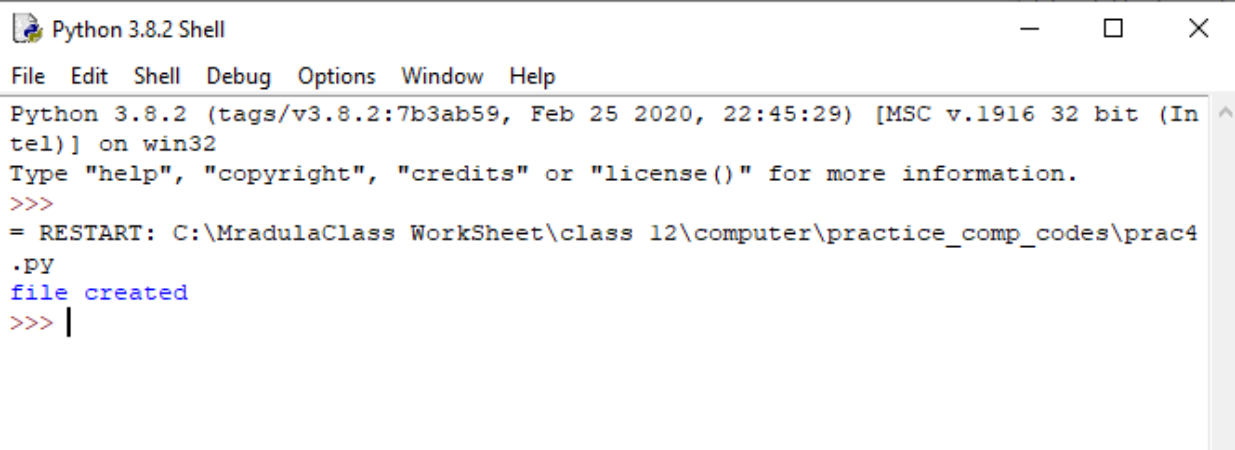
File Edit Format View Help

```
NAME|CLASS|YEAR|PERCENT
mradula|12 a |2007|87
```

Ln 1, Col 1 100% Windows (CRLF) UTF-8

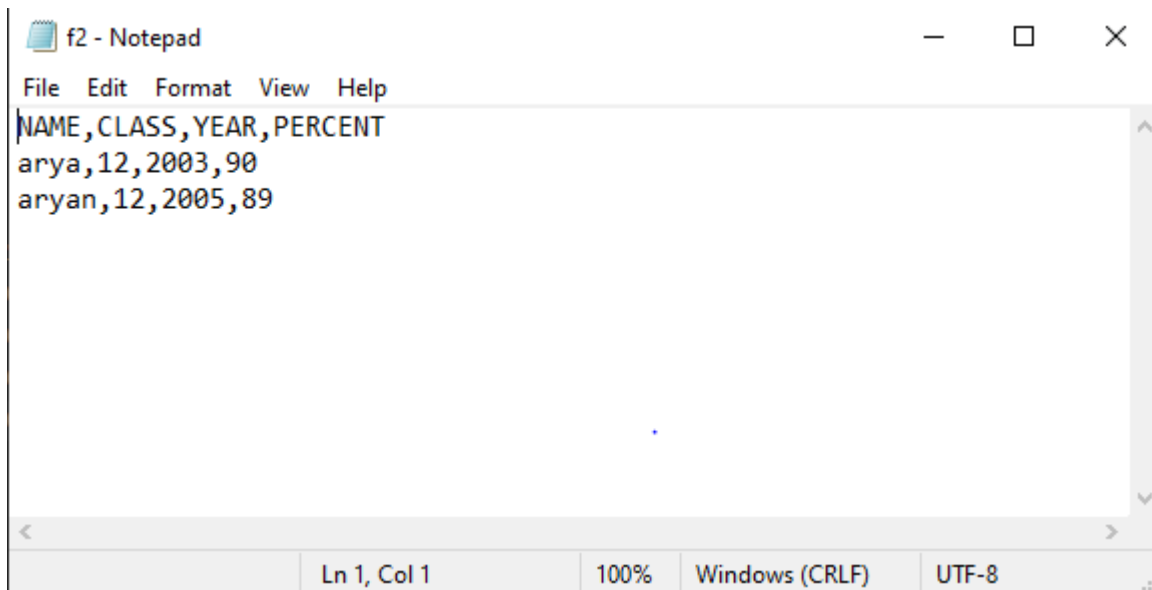
- Writing in csv –multiple rows

```
import csv
f=['NAME','CLASS','YEAR','PERCENT']
l=[['arya','12','2003','90'],['aryan','12','2005','89']]
with open("f2.csv","w",newline="") as fobj:
    csv_w=csv.writer(fobj,delimiter=',')
    csv_w.writerow(f)
    csv_w.writerows(l)
print("file created")
```



A screenshot of a Python 3.8.2 Shell window. The window title is "Python 3.8.2 Shell". The menu bar includes "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The status bar at the bottom shows "Ln 1, Col 1", "100%", "Windows (CRLF)", and "UTF-8". The main text area displays the following output:

```
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice_comp_codes\prac4
.PY
file created
>>> |
```



A screenshot of a Notepad window titled "f2 - Notepad". The menu bar includes "File", "Edit", "Format", "View", and "Help". The status bar at the bottom shows "Ln 1, Col 1", "100%", "Windows (CRLF)", and "UTF-8". The main text area displays the contents of the CSV file:

```
NAME,CLASS,YEAR,PERCENT
arya,12,2003,90
aryan,12,2005,89
```

- Reading csv file

```
import csv
```

```
def read_data():
```

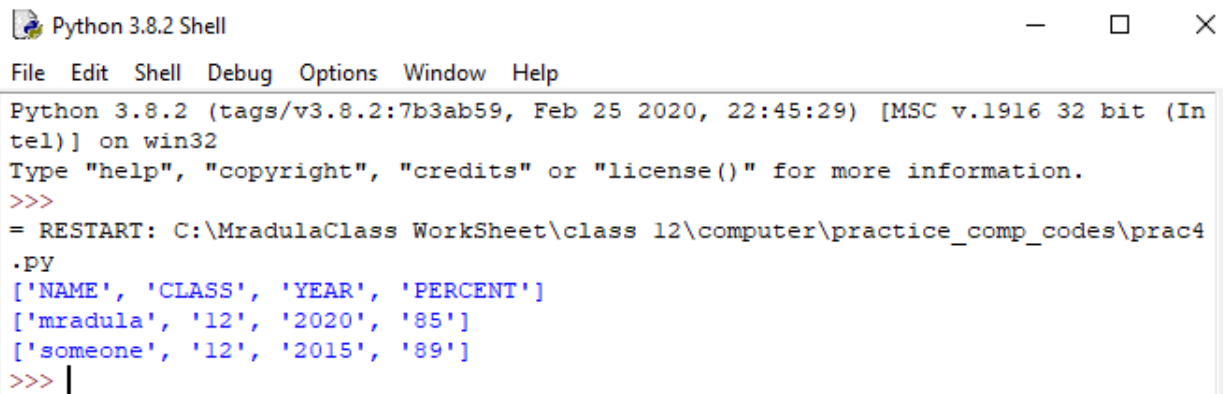
```
    with open("f1.csv",'r') as fobj:
```

```
        csv_r=csv.reader(fobj)
```

```
        for record in csv_r:
```

```
            print(record)
```

```
read_data()
```



The screenshot shows a Python 3.8.2 Shell window with the following content:

```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice_comp_codes\prac4
.py
['NAME', 'CLASS', 'YEAR', 'PERCENT']
['mradula', '12', '2020', '85']
['someone', '12', '2015', '89']
>>> |
```

- Menu driven program

```
import csv
def write_data():
    fields=['NAME','CLASS','YEAR','PERCENT']
    with open("f1.csv",'w',newline='') as fobj:
        csv_w=csv.writer(fobj,delimiter=',')
        csv_w.writerow(fields)
        num_of_rec=int(input("How many records do u want to enter"))
        for i in range(num_of_rec):
            nm=input("enter name")
            cl=input("enter class")
            yr=input("enter year")
            pr=input("enter percentage")
            L=[nm,cl,yr,pr]
            csv_w.writerow(L)
        print("File created")
def read_data():
    with open("f1.csv",'r') as fobj:
        csv_r=csv.reader(fobj)
        for record in csv_r:
            print(record)
while True:
    print("1: write data")
    print("2: display all")
    print("0: exit")
    ch=int(input("enter choice"))
    if ch==1:
        write_data()
    elif ch==2:
        read_data()
    elif ch==0:
        break
```

File Edit Shell Debug Options Window Help

Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

&gt;&gt;&gt;

= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice\_comp\_codes\prac4.py

1: write data

2: display all

0: exit

enter choice2

['NAME', 'CLASS', 'YEAR', 'PERCENT']

['mradula', '12', '2020', '85']

['someone', '12', '2015', '89']

1: write data

2: display all

0: exit

enter choice0

&gt;&gt;&gt; |



- Reading csv file and adding to another list

```
import csv
```

```
def read_data():
```

```
    with open("f1.csv","r") as fobj:
```

```
        csv_r=csv.reader(fobj)
```

```
        rec_lst=[]
```

```
        for r in csv_r:
```

```
            rec_lst.append(r)
```

```
        print(rec_lst)
```

```
read_data()
```

Python 3.8.2 Shell

File Edit Shell Debug Options Window Help

Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice\_comp\_codes\prac4.py

[['NAME', 'CLASS', 'YEAR', 'PERCENT'], ['mradula', '12', '2020', '85'], ['someone', '12', '2015', '89']]

>>> |

- Reading first line of csv file and counting other rows

```
import csv
```

```
def read_data():
```

```
    with open("f1.csv","r") as fobj:
```

```
        csv_r=csv.reader(fobj)
```

```
        col=next(csv_r)
```

```
        print("columns:",col)
```

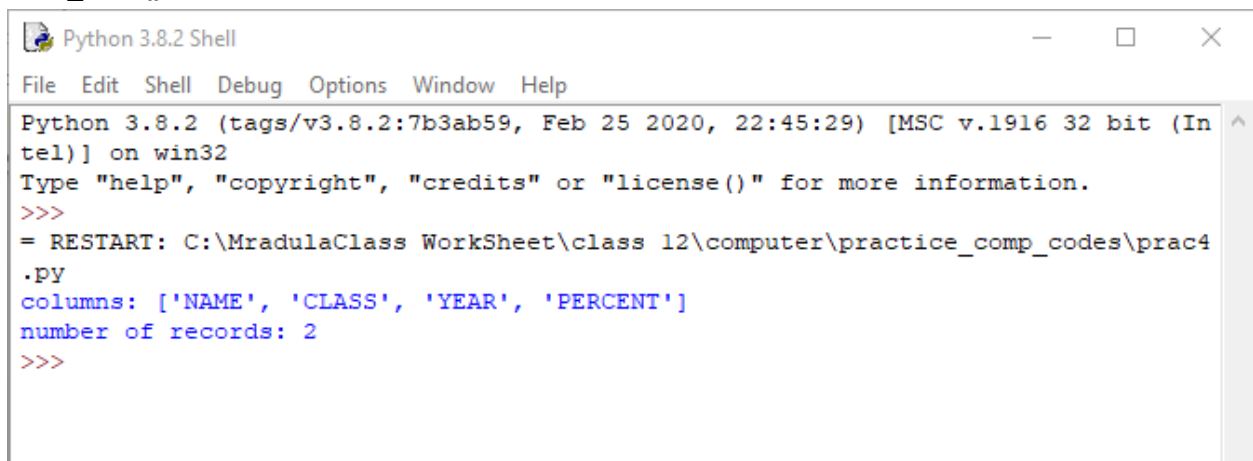
```
        r=0
```

```
        for rec in csv_r:
```

```
            r+=1
```

```
        print("number of records:",r)
```

```
read_data()
```



```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice_comp_codes\prac4
.py
columns: ['NAME', 'CLASS', 'YEAR', 'PERCENT']
number of records: 2
>>>
```

- Reading csv file and counting total rows

```
import csv
```

```
def read_data():
```

```
    with open("f1.csv","r") as fobj:
```

```
        csv_r=csv.reader(fobj)
```

```
        col=next(csv_r)
```

```
        print("columns:",col)
```

```
        r=0
```

```
        fobj.seek(20)
```

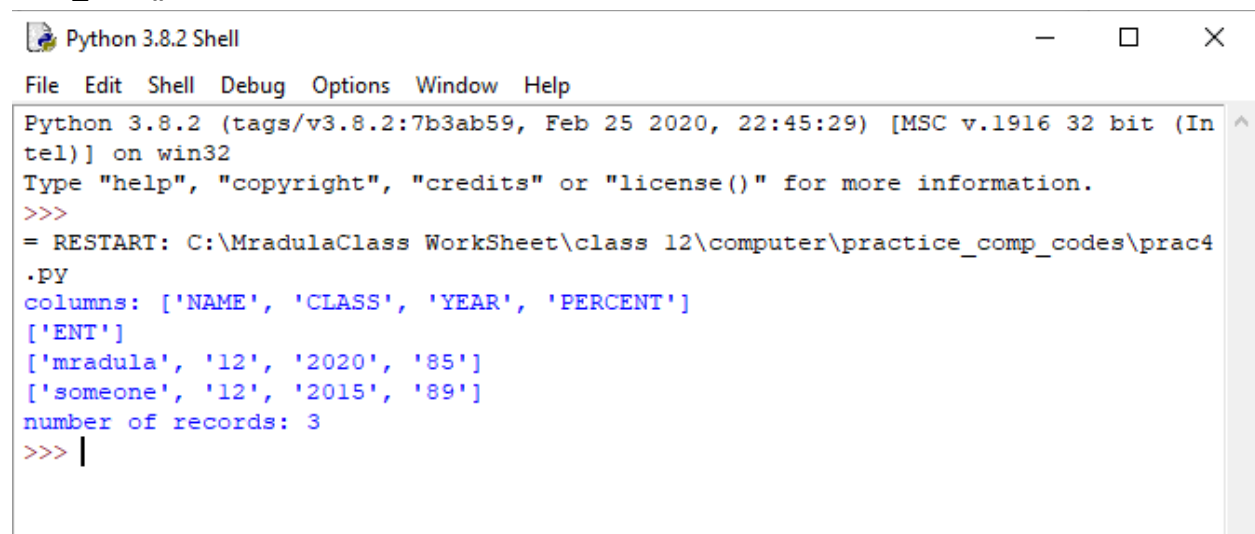
```
        for rec in csv_r:
```

```
            print(rec)
```

```
            r+=1
```

```
        print("number of records:",r)
```

```
read_data()
```



```
Python 3.8.2 Shell
File Edit Shell Debug Options Window Help
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice_comp_codes\prac4
.PY
columns: ['NAME', 'CLASS', 'YEAR', 'PERCENT']
['ENT']
['mradula', '12', '2020', '85']
['someone', '12', '2015', '89']
number of records: 3
>>> |
```

- Reading csv file and counting total number of records (except first row)in it

```
import csv
```

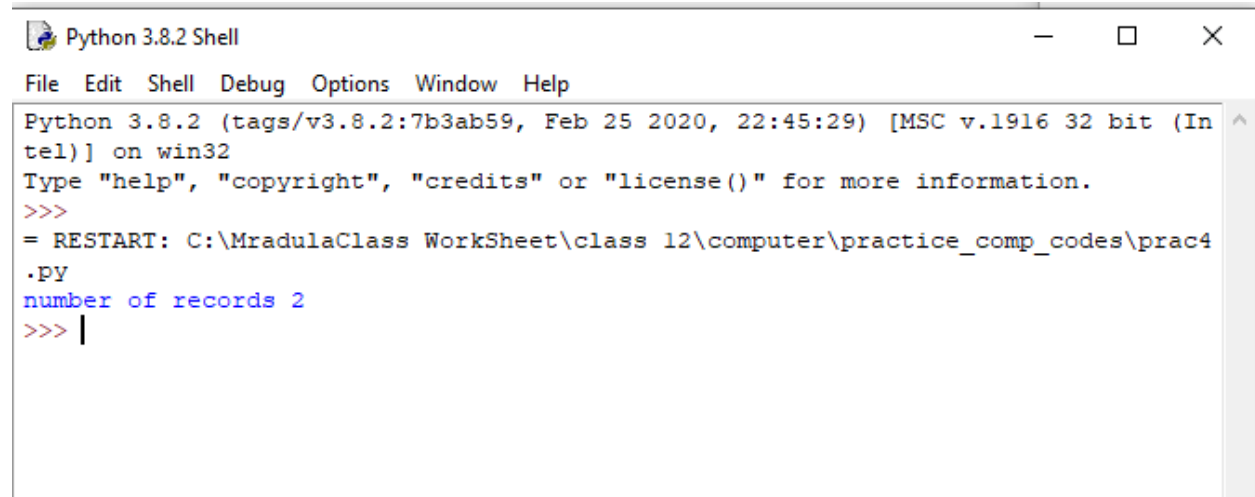
```
def read_data():
```

```
    with open("f1.csv","r") as fobj:
```

```
        csv_r=csv.reader(fobj)
```

```
        print("number of records",len(list(csv_r))-1)
```

```
read_data()
```



The screenshot shows a Python 3.8.2 Shell window with a menu bar (File, Edit, Shell, Debug, Options, Window, Help). The command prompt displays the following text:

```
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice_comp_codes\prac4
.py
number of records 2
>>> |
```

- Reading csv file and printing records simultaneously

```
import csv
```

```
def read_data():
```

```
    with open("f1.csv","r") as fobj:
```

```
        csv_r=csv.reader(fobj)
```

```
        for rec in csv_r:
```

```
            print(csv_r.line_num)
```

```
            print(rec)
```

```
read_data()
```

Python 3.8.2 Shell

File Edit Shell Debug Options Window Help

Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice\_comp\_codes\prac4.py

1

['NAME', 'CLASS', 'YEAR', 'PERCENT']

2

['mradula', '12', '2020', '85']

3

['someone', '12', '2015', '89']

>>> |

- Reading csv without showing list

```
import csv
```

```
def read_data():
```

```
    with open("f1.csv","r") as fobj:
```

```
        csv_r=csv.reader(fobj)
```

```
        for rec in csv_r:
```

```
            print(",".join(rec))
```

```
read_data()
```

Python 3.8.2 Shell

File Edit Shell Debug Options Window Help

Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (Intel)] on win32

Type "help", "copyright", "credits" or "license()" for more information.

>>>

= RESTART: C:\MradulaClass WorkSheet\class 12\computer\practice\_comp\_codes\prac4.py

NAME, CLASS, YEAR, PERCENT

mradula, 12, 2020, 85

someone, 12, 2015, 89

>>> |