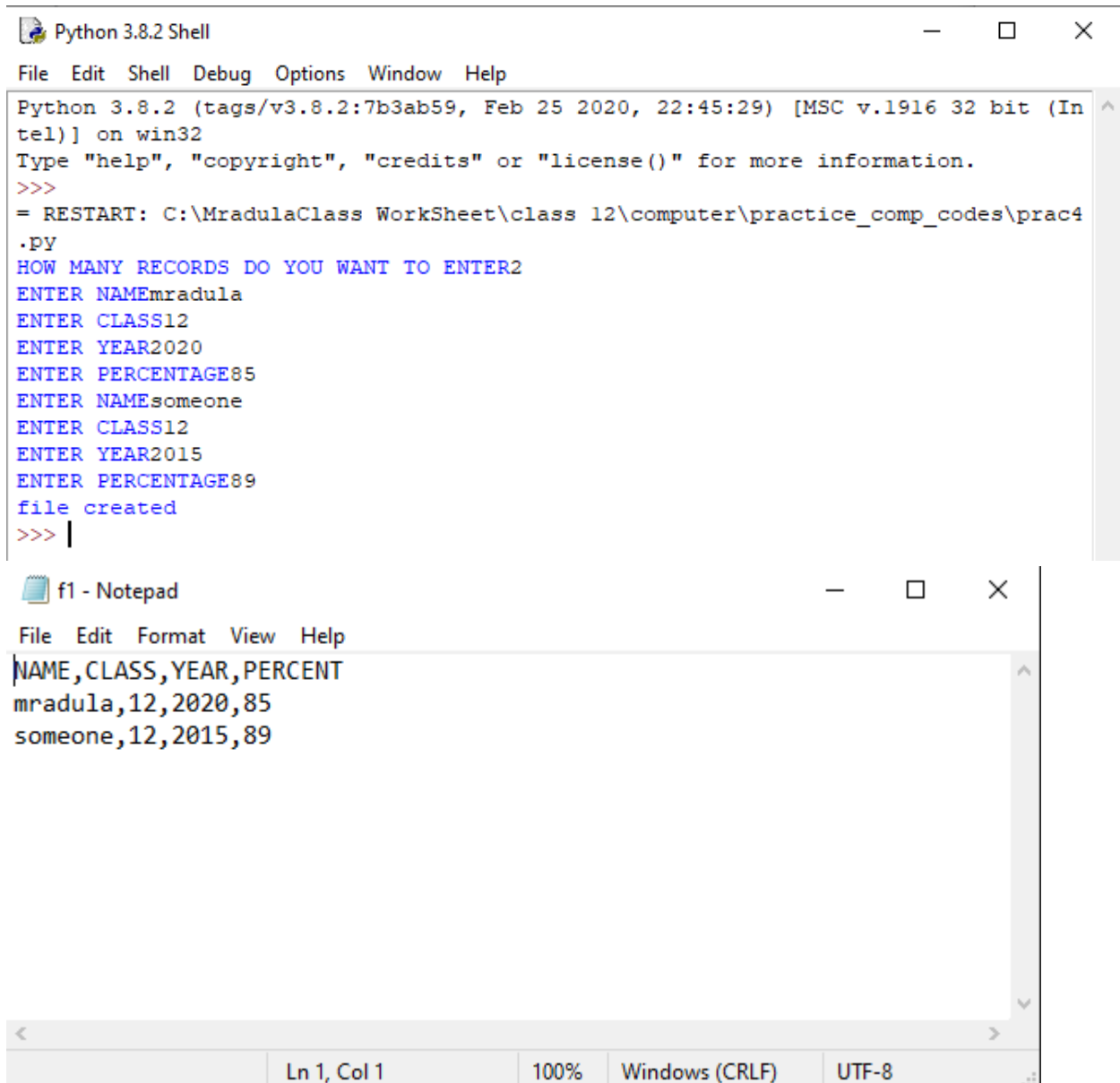# CSV FILE HANDLING

- **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")
```
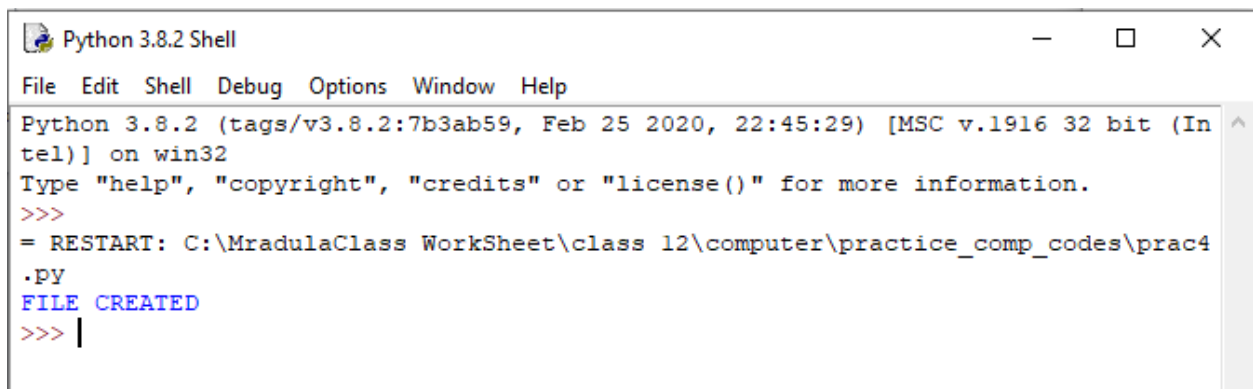

Python 3.8.2 Shell

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 (In
tel)] 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
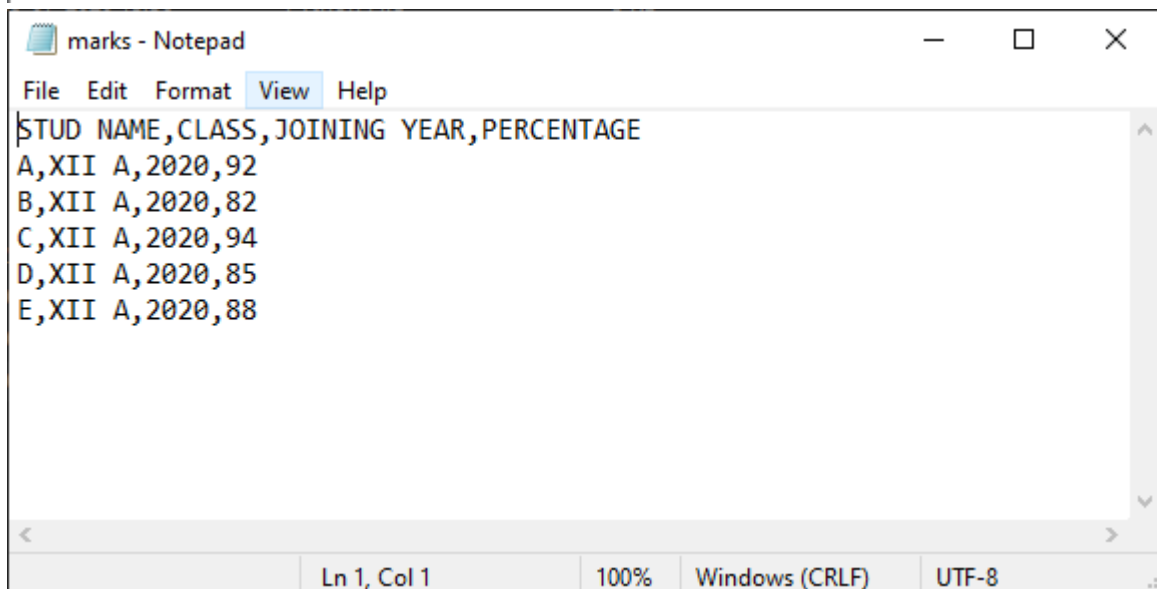
- **Writing in csv list of lists**

```
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 (In
tel)] 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
>>>
```
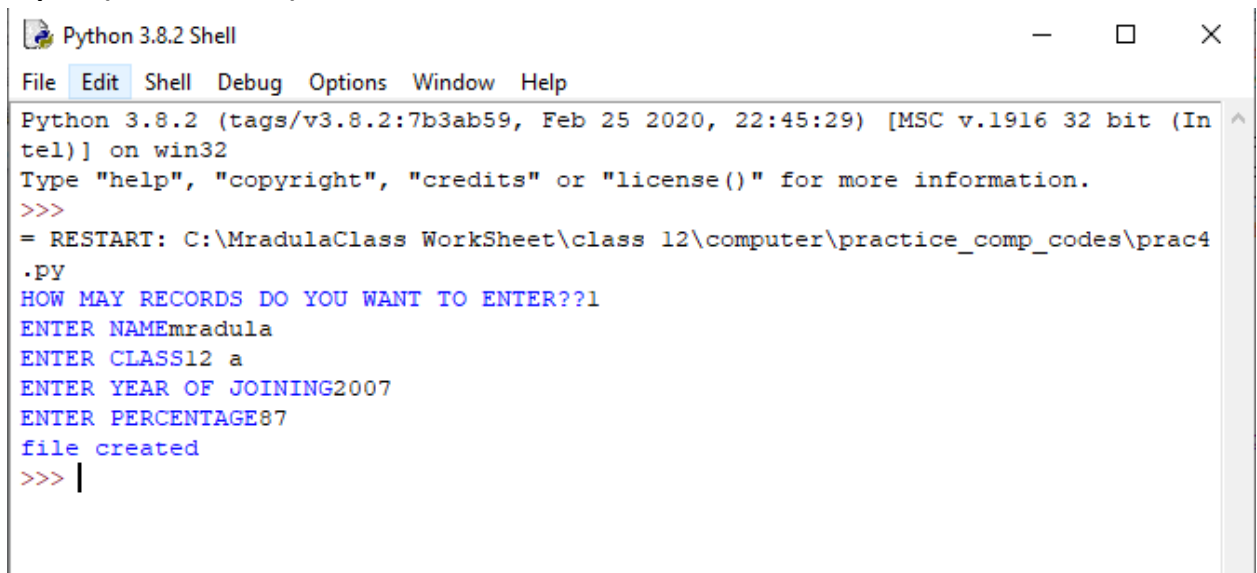
marks - Notepad — □ ×

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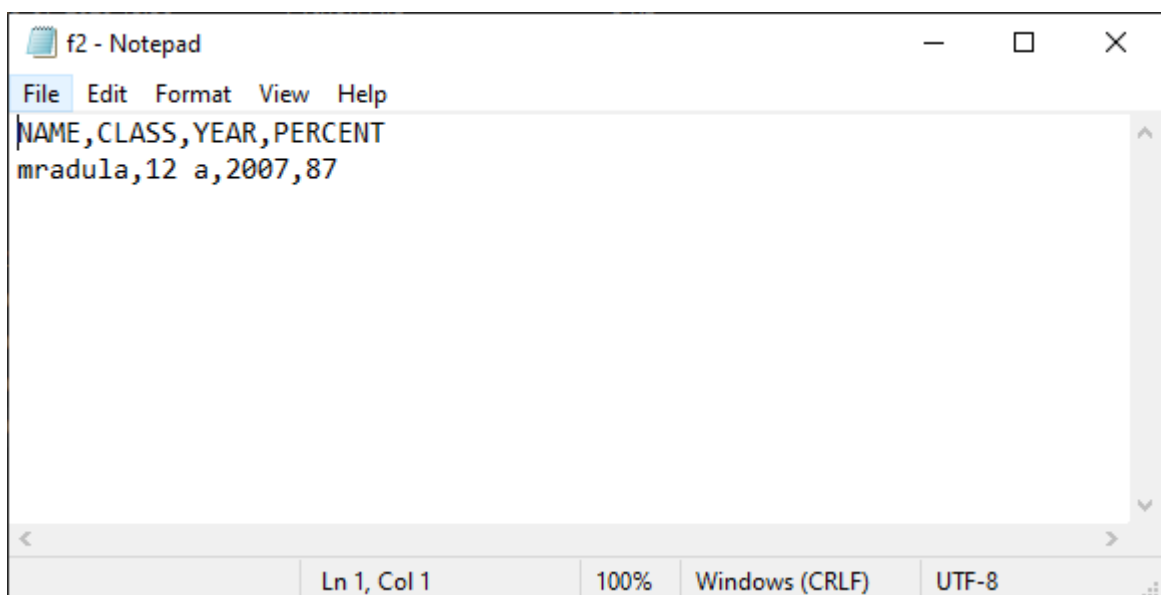
Ln 1, Col 1   100%   Windows (CRLF)   UTF-8

- **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")
```
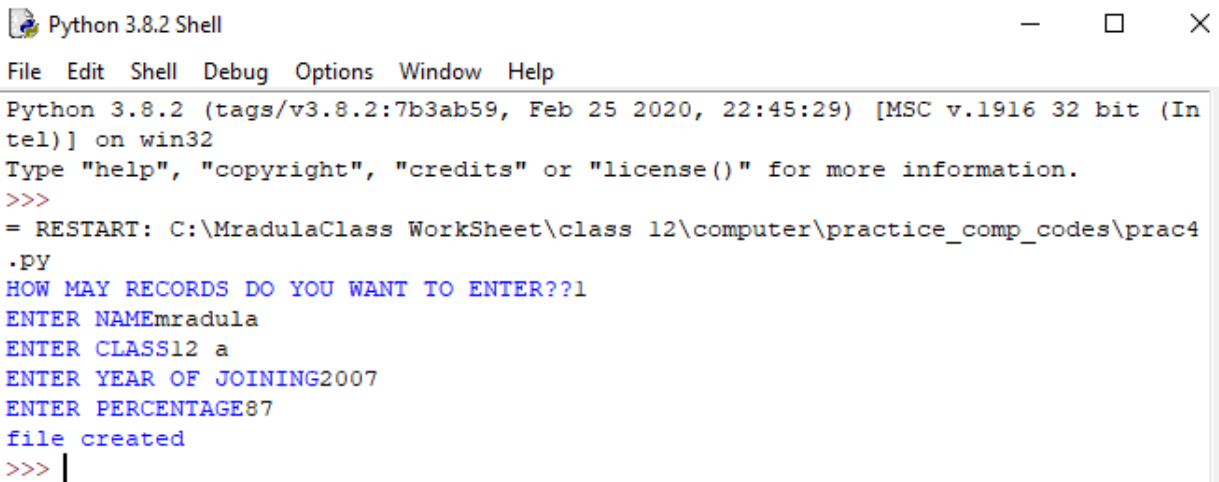
Python 3.8.2 Shell — □ ✕

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 (In
tel)] 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 — □ ✕
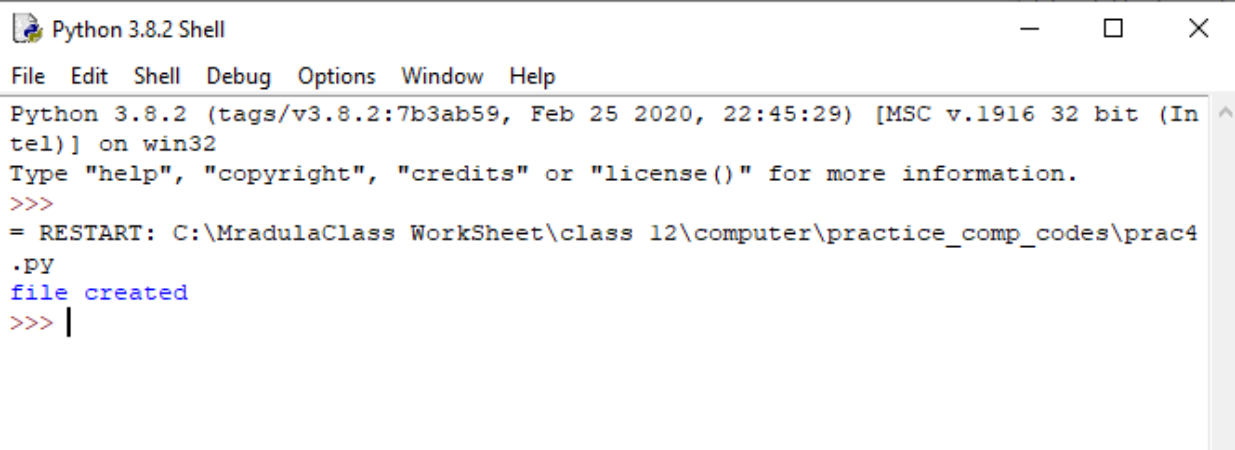
File Edit Format View Help

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

Ln 1, Col 1   100%   Windows (CRLF)   UTF-8
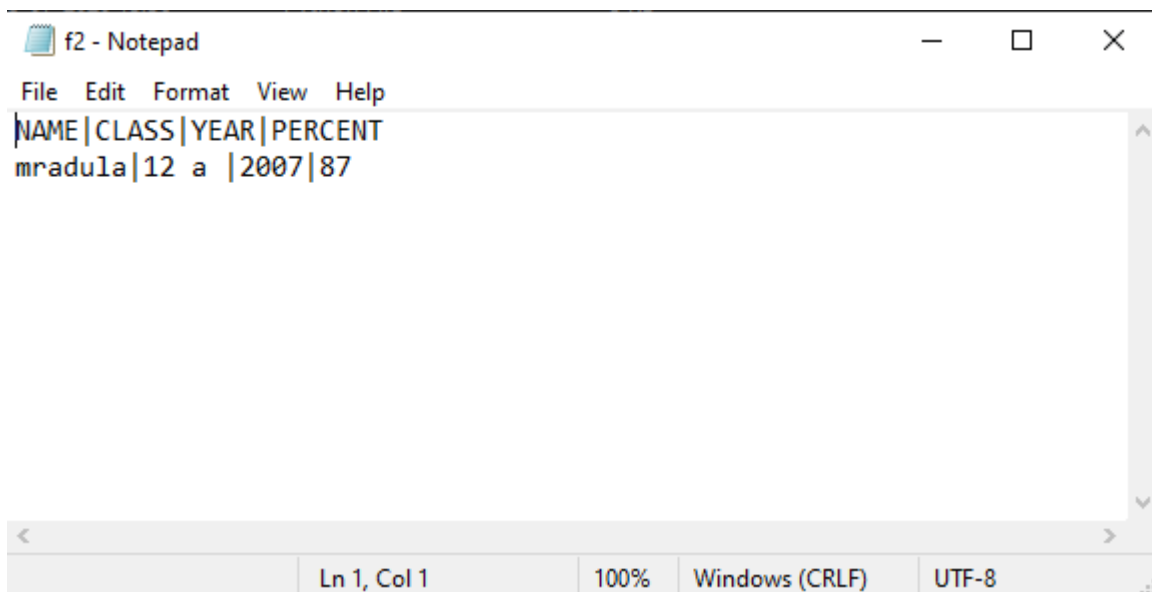
- **Writing in csv with delimiter as '|'**

```
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")
```

- **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")
```

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 (In
tel)] 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
>>>
```
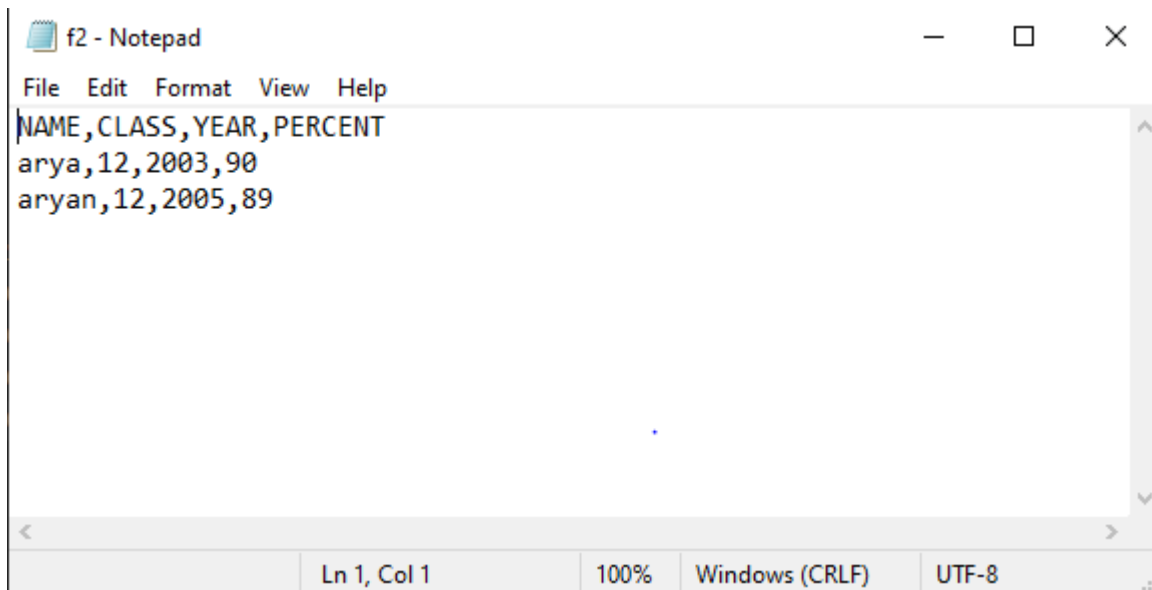
f2 - Notepad — □ ×

File Edit Format View Help

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

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

- **Reading csv file**
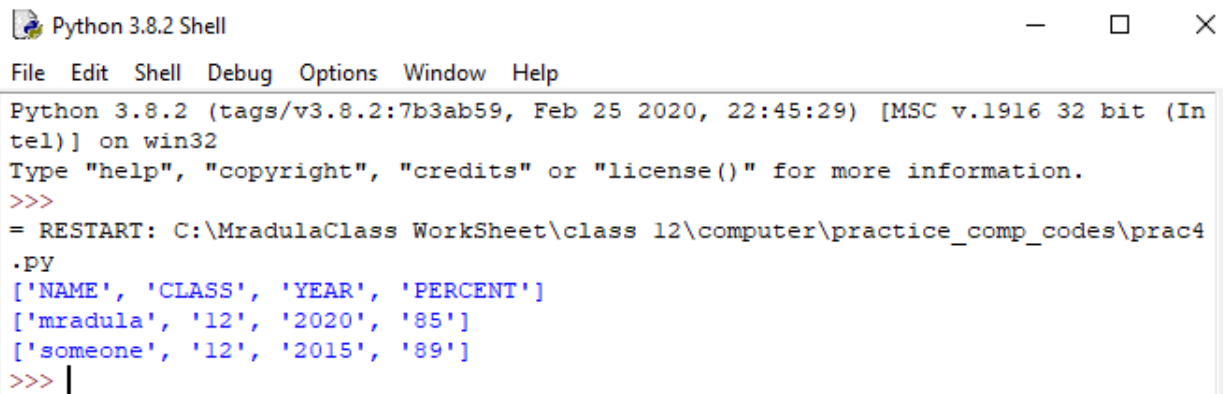
```
import csv
def read_data():
    with open("f1.csv",'r') as fobj:
        csv_r=csv.reader(fobj)
        for record in csv_r:
            print(record)
read_data()
```



```
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 (In
tel)] 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
```

```
Python 3.8.2 (tags/v3.8.2:7b3ab59, Feb 25 2020, 22:45:29) [MSC v.1916 32 bit (In
tel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= 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
>>> |
```

- **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 (In
tel)] 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'], ['someon
e', '12', '2015', '89']]
>>>
```

- **Reading first line of csv file and counting other rows**

```python
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 (In
tel)] 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**

```python
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()
```
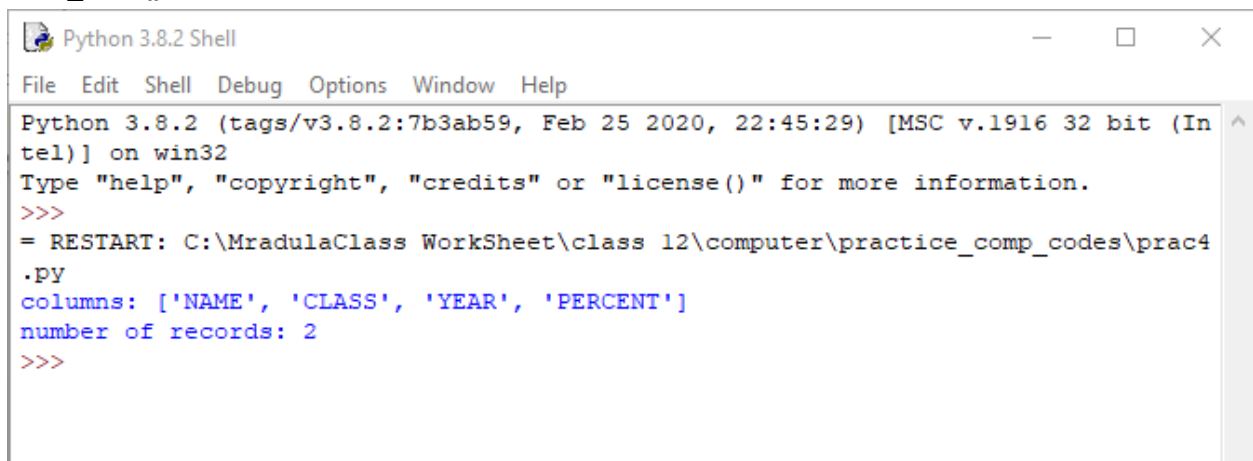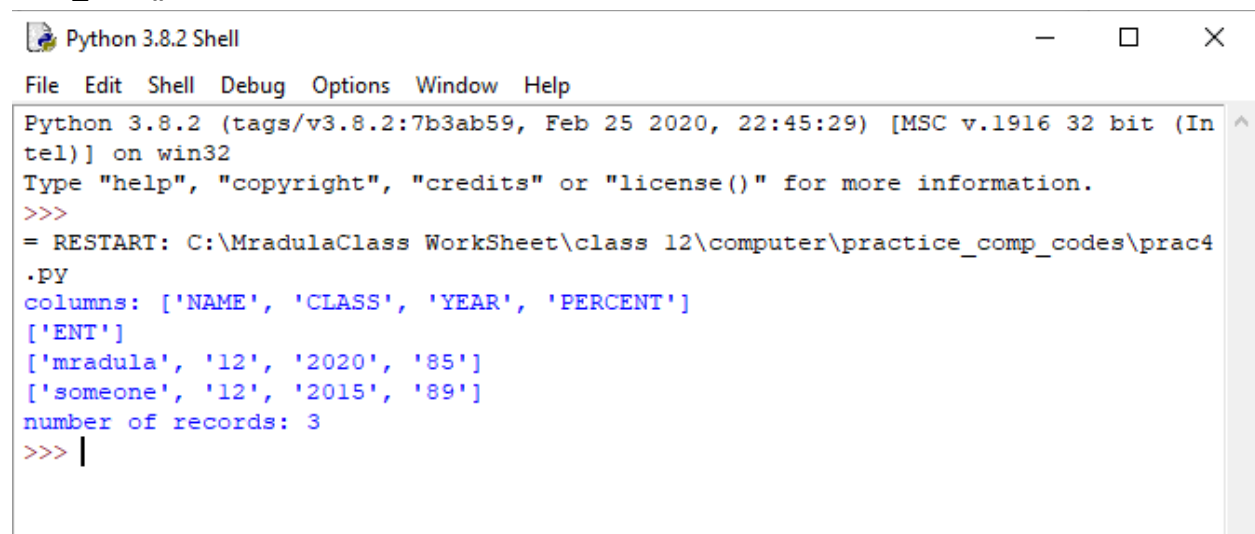
```
Python 3.8.2 Shell                                          —    □    ✕

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 (In
tel)] 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
>>> |
```

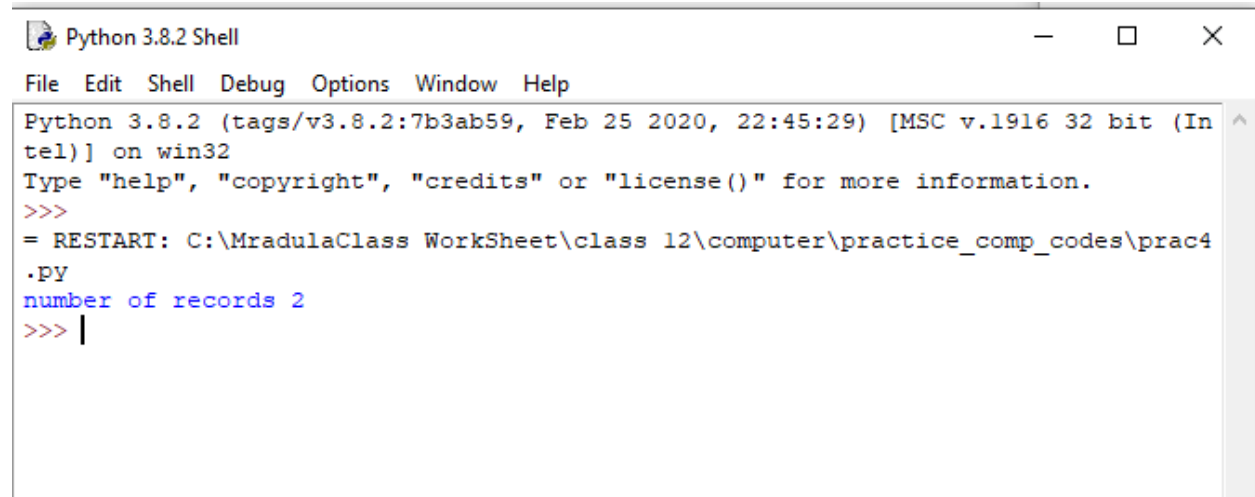- **Reading csv file and counting total number of records (except first row)in it**

```python
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()
```

```
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 (In
tel)] 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**

```python
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 (In
tel)] 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**

```python
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 (In
tel)] 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
>>>
```