In [4]:
```
import csv
```

In [5]:
```
file = open('Salary_Data.csv')
type(file)
```

Out[5]:
```
_io.TextIOWrapper
```

In [7]:
```
csvreader = csv.reader(file)
```

In [9]:
```
header = []
header = next(csvreader)
header
```

Out[9]:
```
['YearsExperience', 'Salary']
```

In [15]:
```
rows = []
for row in csvreader:
rows.append(row)
rows
```

```
  Cell In[15], line 3
    rows.append(row)
    ^
IndentationError: expected an indented block after 'for' statement on line 2
```

In [17]:
```
import csv
rows = []
with open("Salary_Data.csv", 'r') as file:
    csvreader = csv.reader(file)
    header = next(csvreader)
    for row in csvreader:
        rows.append(row)
print(header)
print(rows)
```

```
['YearsExperience', 'Salary']
[['1.1', '39343.00'], ['1.3', '46205.00'], ['1.5', '37731.00'], ['2.0', '43525.00'], ['2.2', '39891.00'], ['2.9', '56642.00'],
['3.0', '60150.00'], ['3.2', '54445.00'], ['3.2', '64445.00'], ['3.7', '57189.00'], ['3.9', '63218.00'], ['4.0', '55794.00'],
['4.0', '56957.00'], ['4.1', '57081.00'], ['4.5', '61111.00'], ['4.9', '67938.00'], ['5.1', '66029.00'], ['5.3', '83088.00'],
['5.9', '81363.00'], ['6.0', '93940.00'], ['6.8', '91738.00'], ['7.1', '98273.00'], ['7.9', '101302.00'], ['8.2', '113812.00'],
['8.7', '109431.00'], ['9.0', '105582.00'], ['9.5', '116969.00'], ['9.6', '112635.00'], ['10.3', '122391.00'], ['10.5', '12187
2.00']]
```

In [18]:
```
with open('Salary_Data.csv') as file:
    content = file.readlines()
header = content[:1]
rows = content[1:]
print(header)
print(rows)
```

```
['YearsExperience,Salary\n']
['1.1,39343.00\n', '1.3,46205.00\n', '1.5,37731.00\n', '2.0,43525.00\n', '2.2,39891.00\n', '2.9,56642.00\n', '3.0,60150.00\n',
'3.2,54445.00\n', '3.2,64445.00\n', '3.7,57189.00\n', '3.9,63218.00\n', '4.0,55794.00\n', '4.0,56957.00\n', '4.1,57081.00\n',
'4.5,61111.00\n', '4.9,67938.00\n', '5.1,66029.00\n', '5.3,83088.00\n', '5.9,81363.00\n', '6.0,93940.00\n', '6.8,91738.00\n',
'7.1,98273.00\n', '7.9,101302.00\n', '8.2,113812.00\n', '8.7,109431.00\n', '9.0,105582.00\n', '9.5,116969.00\n', '9.6,112635.00
\n', '10.3,122391.00\n', '10.5,121872.00\n']
```

In [19]:
```
import pandas as pd
```

```
C:\Users\Abhishek\AppData\Local\Temp\ipykernel_21548\4080736814.py:1: DeprecationWarning:
Pyarrow will become a required dependency of pandas in the next major release of pandas (pandas 3.0),
(to allow more performant data types, such as the Arrow string type, and better interoperability with other libraries)
but was not found to be installed on your system.
If this would cause problems for you,
please provide us feedback at https://github.com/pandas-dev/pandas/issues/54466

  import pandas as pd
```

In [22]:
```
data= pd.read_csv("Salary_Data.csv")
data.head()
```

Out[22]:

	YearsExperience	Salary
0	1.1	39343.0
1	1.3	46205.0
2	1.5	37731.0
3	2.0	43525.0
4	2.2	39891.0

In [23]:
```
data.columns
```

Out[23]:
```
Index(['YearsExperience', 'Salary'], dtype='object')
```

In [24]:
```
data.Salary
```

Out[24]:
```
0      39343.0
1      46205.0
2      37731.0
3      43525.0
4      39891.0
5      56642.0
6      60150.0
7      54445.0
8      64445.0
9      57189.0
10     63218.0
11     55794.0
12     56957.0
13     57081.0
14     61111.0
15     67938.0
```

```
16     66029.0
17     83088.0
18     81363.0
19     93940.0
20     91738.0
21     98273.0
22    101302.0
23    113812.0
24    109431.0
25    105582.0
26    116969.0
27    112635.0
28    122391.0
29    121872.0
Name: Salary, dtype: float64
```

In [25]:
```
import csv
```

In [28]:
```
with open('Salary_Data.csv', 'r') as csvfile:
    reader = csv.DictReader(csvfile)
    for row in reader:
       print(row)
```

```
{'YearsExperience': '1.1', 'Salary': '39343.00'}
{'YearsExperience': '1.3', 'Salary': '46205.00'}
{'YearsExperience': '1.5', 'Salary': '37731.00'}
{'YearsExperience': '2.0', 'Salary': '43525.00'}
{'YearsExperience': '2.2', 'Salary': '39891.00'}
{'YearsExperience': '2.9', 'Salary': '56642.00'}
{'YearsExperience': '3.0', 'Salary': '60150.00'}
{'YearsExperience': '3.2', 'Salary': '54445.00'}
{'YearsExperience': '3.2', 'Salary': '64445.00'}
{'YearsExperience': '3.7', 'Salary': '57189.00'}
{'YearsExperience': '3.9', 'Salary': '63218.00'}
{'YearsExperience': '4.0', 'Salary': '55794.00'}
{'YearsExperience': '4.0', 'Salary': '56957.00'}
{'YearsExperience': '4.1', 'Salary': '57081.00'}
{'YearsExperience': '4.5', 'Salary': '61111.00'}
{'YearsExperience': '4.9', 'Salary': '67938.00'}
{'YearsExperience': '5.1', 'Salary': '66029.00'}
{'YearsExperience': '5.3', 'Salary': '83088.00'}
{'YearsExperience': '5.9', 'Salary': '81363.00'}
{'YearsExperience': '6.0', 'Salary': '93940.00'}
{'YearsExperience': '6.8', 'Salary': '91738.00'}
{'YearsExperience': '7.1', 'Salary': '98273.00'}
{'YearsExperience': '7.9', 'Salary': '101302.00'}
{'YearsExperience': '8.2', 'Salary': '113812.00'}
{'YearsExperience': '8.7', 'Salary': '109431.00'}
{'YearsExperience': '9.0', 'Salary': '105582.00'}
{'YearsExperience': '9.5', 'Salary': '116969.00'}
{'YearsExperience': '9.6', 'Salary': '112635.00'}
{'YearsExperience': '10.3', 'Salary': '122391.00'}
{'YearsExperience': '10.5', 'Salary': '121872.00'}
```

In [29]:
```
header = ['Name', 'M1 Score', 'M2 Score']
data = [['Alex', 62, 80], ['Brad', 45, 56], ['Joey', 85, 98]]
```

In [30]:
```
import csv
```

In [31]:
```
filename = 'Students_Data.csv'
with open(filename, 'w', newline="") as file:
    csvwriter = csv.writer(file) # 2. create a csvwriter object
    csvwriter.writerow(header) # 4. write the header
    csvwriter.writerows(data) # 5. write the rest of the data
```

In [32]:
```
header = ['Name', 'M1 Score', 'M2 Score']
data = [['Alex', 62, 80], ['Brad', 45, 56], ['Joey', 85, 98]]
filename = 'Student_scores.csv'
with open(filename, 'w') as file:
    for header in header:
        file.write(str(header)+', ')
    file.write('n')
    for row in data:
        for x in row:
            file.write(str(x)+', ')
        file.write('n')
```

In [ ]:
```
```