File Handling Part 3

In [ ]:

```
Mode
'r'
'w'
'a'
'x'
'rb'
'wb'

Data Format  >> text , image , excel , csv , json

```

mode >> 'x'

In [ ]:

```
It will create new file if file does not exists
If file exists , it will throw exception >>  FileExistsError
```

In [1]:

```
file =open('Demo1.txt', 'x')
file.write("Python Training")
file.close()


```

In [2]:

```
1 file =open('Demo1.txt', 'x')
2 file.write("Python Training")
3 file.close()
```

```
---------------------------------------------------------------------------
--
FileExistsError                           Traceback (most recent call las
t)
Cell In[2], line 1
----> 1 file =open('Demo1.txt', 'x')
      2 file.write("Python Training")
      3 file.close()

File ~\AppData\Local\Programs\Python\Python311\Lib\site-packages\IPython
\core\interactiveshell.py:284, in _modified_open(file, *args, **kwargs)
    277 if file in {0, 1, 2}:
    278     raise ValueError(
    279         f"IPython won't let you open fd={file} by default "
    280         "as it is likely to crash IPython. If you know what you a
re doing, "
    281         "you can use builtins' open."
    282     )
--> 284 return io_open(file, *args, **kwargs)

FileExistsError: [Errno 17] File exists: 'Demo1.txt'
```

In [3]:

```
1 with open('Demo2.txt','x') as f :
2     f.write("Machine Learning")
3
4
```

In [4]:

```
with open('Demo2.txt','x') as f :
    f.write("Machine Learning")
```

```
---------------------------------------------------------------------------
--
FileExistsError                           Traceback (most recent call las
t)
Cell In[4], line 1
----> 1 with open('Demo2.txt','x') as f :
      2     f.write("Machine Learning")

File ~\AppData\Local\Programs\Python\Python311\Lib\site-packages\IPython
\core\interactiveshell.py:284, in _modified_open(file, *args, **kwargs)
    277 if file in {0, 1, 2}:
    278     raise ValueError(
    279         f"IPython won't let you open fd={file} by default "
    280         "as it is likely to crash IPython. If you know what you a
re doing, "
    281         "you can use builtins' open."
    282     )
--> 284 return io_open(file, *args, **kwargs)

FileExistsError: [Errno 17] File exists: 'Demo2.txt'
```

JSON

In [ ]:

```
Syntax  :
    json.dump(json_data, file_object)  >> json_data format same as dictionary

```

In [ ]:

```
data={"Key":"Value"}   # Same as dict
data={"Name" : 'Vaishnavi' , "Age":18 , "Location" :'INDIA'}
```

In [5]:

```
data="Python and Machine Learning Training"
with open('Demo3.txt','w') as f :
    f.write(data)
```

In [6]:

```
1 import json
2 json_data={"Name" : 'Vaishnavi' , "Age":18 , "Location" :'INDIA'}
3 with open('test_data.txt','w') as f :
4     f.write(json_data)
```

```
---------------------------------------------------------------------------
--
TypeError                                 Traceback (most recent call las
t)
Cell In[6], line 4
      2 json_data={"Name" : 'Vaishnavi' , "Age":18 , "Location" :'INDIA'}
      3 with open('test_data.txt','w') as f :
----> 4     f.write(json_data)

TypeError: write() argument must be str, not dict
```

In [7]:

```
1 import json
2 json_data='''{"Name" : 'Vaishnavi' , "Age":18 , "Location" :'INDIA'}'''
3 with open('test_data.txt','w') as f :
4     f.write(json_data)
```

In [8]:

```
1 import json
2 json_data={"Name" : 'Vaishnavi' , "Age":18 , "Location" :'INDIA'}
3 with open('json_data.json','w') as f :
4     json.dump(json_data,f)
```

In [10]:

```
employee_data = {"employees":[
    {
        "empid":'E0001',
        "name":"Shyam",
        "email":"shyamjaiswal@gmail.com",
        "JobRole":'Python Developer',
        "Age":34
    },

    {
        "empid":'E0002',
        "name":"Bob",
        "email":"bob32@gmail.com",
         "JobRole":'Web Designer',
        "Age":30
    },

    {
       "empid":'E0003',
      "name":"Jai",
      "email":"jai87@gmail.com",
      "JobRole":'Team Lead',
      "Age":50
    }
]}



import json
with open('employee.json','w') as f:
    json.dump(employee_data,f)

```

In [11]:

```
with open ('Demo3.txt','r') as f :
    data=f.read()
    print(data)
```

```
Python and Machine Learning Training
```

Read json File

In [12]:

```
with open('employee.json','r') as f :
    data=json.load(f)
    print(data)
```

```
{'employees': [{'empid': 'E0001', 'name': 'Shyam', 'email': 'shyamjaiswal
@gmail.com', 'JobRole': 'Python Developer', 'Age': 34}, {'empid': 'E000
2', 'name': 'Bob', 'email': 'bob32@gmail.com', 'JobRole': 'Web Designer',
'Age': 30}, {'empid': 'E0003', 'name': 'Jai', 'email': 'jai87@gmail.com',
'JobRole': 'Team Lead', 'Age': 50}]}
```

In [13]:

```
with open('employee.json','r') as f :
    data=json.read(f)  # can not use read function  for json
    print(data)
```

```
---------------------------------------------------------------------------
--
AttributeError                            Traceback (most recent call las
t)
Cell In[13], line 2
      1 with open('employee.json','r') as f :
----> 2     data=json.read(f)
      3     print(data)

AttributeError: module 'json' has no attribute 'read'
```

Extra Info

In [ ]:

```
Prject >> ML
Different Models  >> Train / Test / Evaluation
Models  >> Linear Regresssion , Logistic Regression , KNN , Decision Tree , Adaboost


#Install  :     pip install scikit-learn  >> CMD
```

In [14]:

```
from sklearn.linear_model import LinearRegression, LogisticRegression
import pickle
linear_reg=LinearRegression()
linear_reg
```

Out[14]:

```
LinearRegression()
```

In a Jupyter environment, please rerun this cell to show the HTML representation or trust the notebook.
On GitHub, the HTML representation is unable to render, please try loading this page with nbviewer.org.

Create Model File

In [15]:

```
import pickle
with open('Linear_regression.pkl','wb') as f :
    pickle.dump(linear_reg,f)

```

Load Model File

In [16]:

```
with open('Linear_regression.pkl','rb') as f :
    model=pickle.load(f)

model
```

Out[16]:

```
LinearRegression()
```

In a Jupyter environment, please rerun this cell to show the HTML representation or trust the notebook.
On GitHub, the HTML representation is unable to render, please try loading this page with nbviewer.org.

In [ ]:

```

```