Program - Reading CSV file in Python

```
import pandas
 # reading the CSV file
csvFile = pandas.read_csv('')
 # displaying the contents of the CSV file
print(csvFile)
```

```
import pandas as pd

df = pd.read_csv('data.csv')

print(df)
```

Writing a CSV file in python

```
import csv
  # field names
fields = ['id','Name', 'salary', 'start_date', 'dept']
 # data rows of csv file
rows = [ ['34','Nikhil', '2000', '2/03/2001', 'operations'],
        ['32','Sanchit', '2300', '2/05/2023', 'Finance'],
     ['21','Sahil', '1400', '3/02/2021', 'operations']]
   # name of csv file
filename = "/content/drive/MyDrive/Test/data.csv"
   # writing to csv file
with open(filename, 'w') as csvfile:
   # creating a csv writer object
   csvwriter = csv.writer(csvfile)
```

```
    # writing the fields
    csvwriter.writerow(fields)

    # writing the data rows
    csvwriter.writerows(rows)
```

Writing a json file in python

```
# Python program to write JSON
# to a file
import json
 # Data to be written
dictionary = {
    "name": "peter",
    "rollno": 56,
    "cgpa": 8.6,
    "phonenumber": "9976770500"
}
 with open("/content/drive/MyDrive/
 Colab Notebooks/dataset/Object/sample.json", "w") as outfile:
    json.dump(dictionary, outfile)
```

Reading a json file in python

```
import json
 # Opening JSON file
with open('/content/drive/MyDrive/Colab Notebooks/dataset/Object/sample.json', 'r') as openfile:
```

```
    # Reading from json file
    json_object = json.load(openfile)
 print(json_object)
print(type(json_object))
```

```
import pandas as pd
df = pd.read_json('/content/drive/MyDrive/Colab Notebooks/dataset/Object/object1.json')
print(df.to_string())
```

Creating a data frame in python using dictionaries

Dictionaries are used to store data values in key:value pairs.

```
# creating data frame in python
import pandas as pd
data = {
  "id": [1, 2, 3],
  "marks": [50, 40, 45]
}
#load data into a DataFrame object:
df = pd.DataFrame(data)
print(df)
#Pandas use the loc attribute to return one or more specified
row(s)
#refer to the row index:
print(df.loc[0])
#refer to the row index:
print(df.loc[[0, 1]])
```

Creating a data frame in python using List

A Python list is an ordered and changeable collection of data objects. Unlike an array, which can contain objects of a single type, a list can contain a mixture of objects.

```
import pandas as pd

data = [['Alekhya',10],['ammu',12],['ale',13]]

df = pd.DataFrame(data,columns=['Name','Age'],dtype=float)

print (df)
```

Creating a data frame in python using List & Dictionaries

```
import pandas as pd

#Create a Dictionary of series

d = {'Name':pd.Series(['Tom','James','Ricky','Vin',

'Steve','Smith','Jack']),

  'Age':pd.Series([25,26,25,23,30,29,23]),

  'Rating':pd.Series([4.23,3.24,3.98,2.56,3.20,4.6,3.8])}

#Create a DataFrame

df = pd.DataFrame(d)

print("Our data series is:")

print(df)
```
