

Program: 130: Write a program OF to convert json to python:

```
import json
```

```
x = '{"name": "xyz", "age": 30, "city": "New York"}'
```

```
# parse x:
```

```
y = json.loads(x)
```

```
# The result is a python dictionary:
```

```
print(y["name"])
```

```
print(y["age"])
```

```
print(y["city"])
```

Output:

xyz

30

New York

Program: 131: Write a program OF to Convert python to Tson:

```
import json
```

```
# a python object (dict):
```

```
x = {  
    "name": "John",  
    "age": 30,  
    "city": "New York"  
}
```

```
# Convert into JSON:
```

```
y = json.dumps(x)
```

```
# the result is a JSON String:
```

```
print(y)
```

Output:

```
{ "name": "John", "age": 30, "city":  
  "New York" }
```


Program : 132 : python program to demonstrate dumps method :

```
import json
```

```
print(json.dumps({"name": "xyz", "age": 30}))
```

```
print(json.dumps("hello"))
```

```
print(json.dumps(42))
```

```
print(json.dumps(True))
```

```
print(json.dumps(False))
```

```
print(json.dumps(None))
```

Output:

```
{"name": "xyz", "age": 30}
```

```
"hello"
```

```
42
```

```
true
```

```
false
```

```
null
```

Program: 133: Write a program of Screen Scraper in python!

Contrived.html

<html>

<body>

<p id="hardworker"> I am hardworker </p>

<p id="Simple"> I am the simple man </p>

</body>

</html>

Output

→ From bs4 import BeautifulSoup

raw_html = open('contrived.html').read()

html = BeautifulSoup(raw_html, 'html.parser')

for p in html.select('p'):

: if p['id'] == 'simple':

print(p.text)

Output:

I am the simple man

Program: 134: Write a program OF mailmerge in python:

python program to mail merge
Names are in the File names.txt
Body of the mail is in body.txt

Open names.txt For reading

with open("names.txt", "r", encoding='utf-8') as names_file:

Open body.txt For reading

with open("body.txt", "r", encoding='utf-8') as body_file:

read entire content of the body
body = body_file.read()

iterate over names

for name in names_file:

mail = "Hello" + name + body

write the mails to individual Files

with open(name.strip() + ".txt", "w", encoding='utf-8')

as mail_file:

mail_file.write(mail)

→ names.txt

Vipul baldha
Rakesh savaliya

→ body.txt

Mail receive

Thank you...!

Output!

Vipul baldha.txt

Hello vipul baldha

Mail receive

Thank you...!

Rakesh savaliya.txt

Hello Rakesh savaliya

Mail receive

Thank you...!

Program: 135: python program to get Excel data to python (using read_excel)

→ empdata.xls

Empid	Ename	Sal
1001	XYZ	45000
1002	ABC	30000
1003	JPS	20000

```
import pandas as pd
```

```
df = pd.read_excel("E:\python_prog\empdata.xls", "Sheet1")
```

```
print(df)
```

Output:

	Empid	Ename	Sal
0	1001	XYZ	45000
1	1002	ABC	30000
2	1003	JPS	20000

Program: 136: Creating Data Frame From .CSV File:

```
import pandas as pd

df = pd.read_csv("E:\python\proj\empdata.csv")

print(df)
```

Output:

	Empid	Ename	Sal
0	1001	XYZ	45000
1	1002	ABC	30000
2	1003	JPJ	20000

Program: 137: Creating Data Frame From python Dictionary:

```
import pandas as pd

empdata = {"empid": [1001, 1002], "ename": ["ABC", "XYZ"], "sal": [10000, 20000]}
```

```
df = pd.DataFrame(empdata)

print(df)
```

Output:

	empid	ename	sal
0	1001	ABC	10000
1	1002	XYZ	20000

Program: 138: Write a program of Data Frame with different operations.

→ empdata2.csv

Empid	Ename	Sal	Doj
1001	ABC	45000	09-08-2002
1002	BCD	35000	01-07-2003
1003	JPJ	15000	02-06-2004
1004	XYZ	26000	09-07-2005
1005	MNP	7000	10-01-2001

```
import pandas as pd
```

```
df = pd.read_csv("E:\python\empdata2.csv")
```

```
print(df)
```

Output:

	Empid	Ename	Sal	Doj
0	1001	ABC	45000	09-08-2002
1	1002	BCD	35000	01-07-2003
2	1003	JPJ	15000	02-06-2004
3	1004	XYZ	26000	09-07-2005
4	1005	MNP	7000	10-01-2001

```
r, c = df.shape
```

```
print(r) # row
```

```
print(c) # column
```

Output:

5

4

```
print(df.head(2))
print(df.tail(2))
```

Output:

	Empid	Ename	Sal	Doj
0	1001	CLC	45000	09-08-2002
1	1002	BCD	35000	01-07-2003

	Empid	Ename	Sal	Doj
3	1004	XY2	26000	09-07-2005
4	1005	MNP	7000	10-01-2001

```
print(df[2:5]) #Retrieving a range of Rows
```

Output:

	Empid	Ename	Sal	Doj
2	1003	JPI	15000	02-06-2004
3	1004	XY2	26000	09-07-2005
4	1005	MNP	7000	10-01-2001

```
print(df.columns) # column name
print(df[['Empid', 'Sal']]) # column data
```


Output:

```
Index(['Empid', 'Ename', 'Sal', 'Doj'], dtype=
      'object')
```

	Empid	Sal
0	1001	45000
1	1002	35000
2	1003	15000
3	1004	26000
4	1005	7000

```
print("Maximum salary is =", df['Sal'].
      max())
```

```
print("Minimum salary is =", df['Sal'].
      min())
```

Output:

Maximum salary is = 45000

Minimum salary is = 7000

```
print(df[df.Sal > 30000])
```

```
print(df[['Empid']] [df.Sal > 35000])
```

```
print(df.index)
```

Output:

	Empid	Ename	Sal	Doj
0	1001	ABC	45000	09-08-2002
1	1002	BCD	35000	07-07-2003

Empid
0 1001

RangeIndex (start=0, stop=5, step=1)

```
df1 = df.set_index('Empid')
print(df1.loc[1004])
```

Output:

Ename xyz
Sal 26000
Doj 07-07-2005
Name: 1004, dtype: object