

Informatics Practices

ART Integrated Activity

Data Handling [CSV-Dataframe-Matplotlib]

CSV File

	A	B
1	Mass	Radius
2	1.33	568.23
3	4.87	278.93
4	5.97	562.13

```
temp.py x untitle0.py x untitle1.py x
1 import pandas as pd
2 import matplotlib.pyplot as plt
3 df=pd.read_csv("F:\\naru.csv")
4
5 plot=df.plot.pie(y='Mass',labels=['Mercury', 'Venus', 'Earth'])
6 plt.title("UNIVERSE/GALAXY")
7 plot=df.plot.pie(y='Radius',labels=['Mercury', 'Venus', 'Earth'])
8 plt.title("UNIVERSE/GALAXY")
9 plot=df.plot.pie(subplots=True, labels=['Mercury', 'Venus', 'Earth'], figsize=(11,6))
10 plt.title("UNIVERSE/GALAXY")
```

df - DataFrame

Index	Mass	Radius
0	1.33	568.23
1	4.87	278.93
2	5.97	562.13

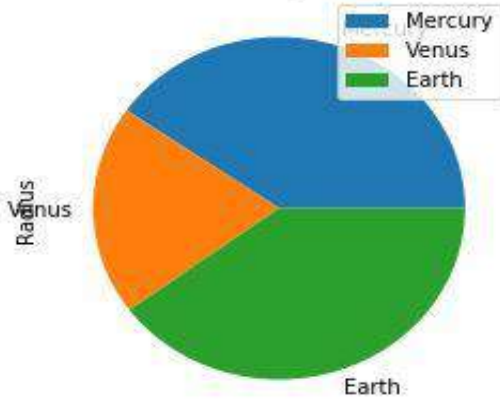
OUTPUT

IPython console

Console 1/A

Earth

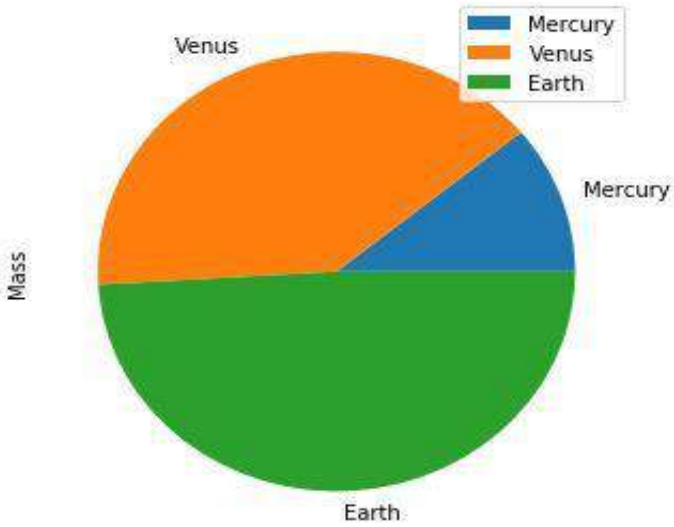
UNIVERSE/GALAXY



Radius

Earth

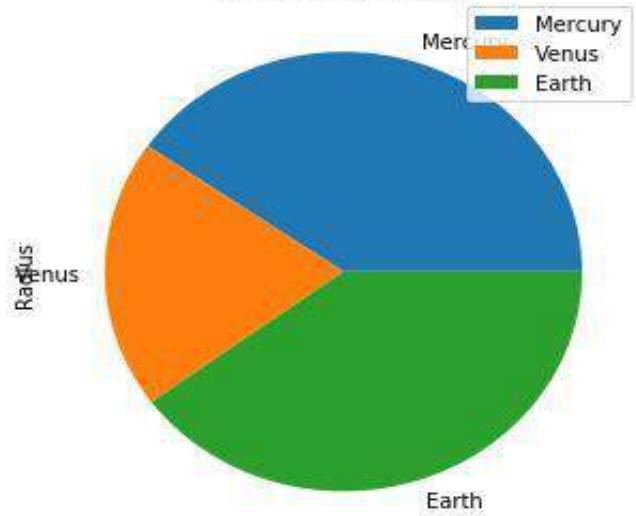
UNIVERSE/GALAXY



Mass

Earth

UNIVERSE/GALAXY



Radius

Earth

Pop.CSV

Perpop.csv

	A	B		A	B
1	Rural	Urban	1	Rural	Urban
2	712320	67717	2	91.32	8.68
3	931261	141492	3	86.81	13.19
4	1045493	375460	4	73.58	26.42
5	1331504	505645	5	72.48	27.52
6	1717928	575968	6	74.89	25.11
7	2021640	834154	7	70.79	29.21

```
temp.py x untitle0.py x untitle1.py x
1 import pandas as pd
2 import matplotlib.pyplot as plt
3 df1=pd.read_csv("F:\\pop.csv")
4 plot1=df1.plot.pie(subplots=True, figsize=(10,5), labels=[1961,1971,1981,1991,2001,2011])
5 plt.title("Rural and Urban Population of Manipur")
6
7 df2=pd.read_csv("F:\\perpop.csv")
8 plot1=df2.plot.pie(subplots=True, figsize=(10,5), labels=[1961,1971,1981,1991,2001,2011])
9 plt.title("Rural and Urban Population of Manipur percentage wise")
```

df1 - DataFrame

Index	Rural	Urban
0	712320	67717
1	931261	141492
2	1045493	375460
3	1331504	505645
4	1717928	575968
5	2021640	834154

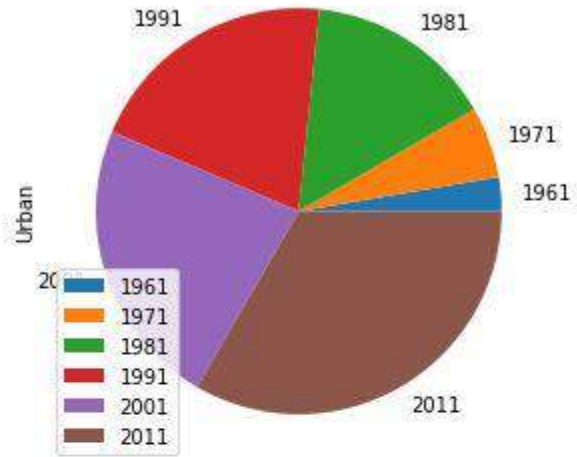
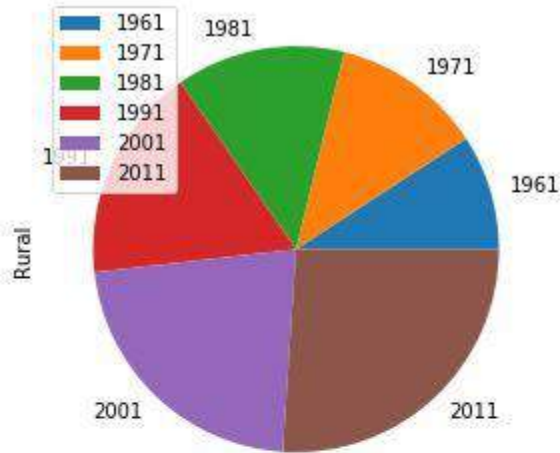
df2 - DataFrame

Index	Rural	Urban
0	91.32	8.68
1	86.81	13.19
2	73.58	26.42
3	72.48	27.52
4	74.89	25.11
5	70.79	29.21

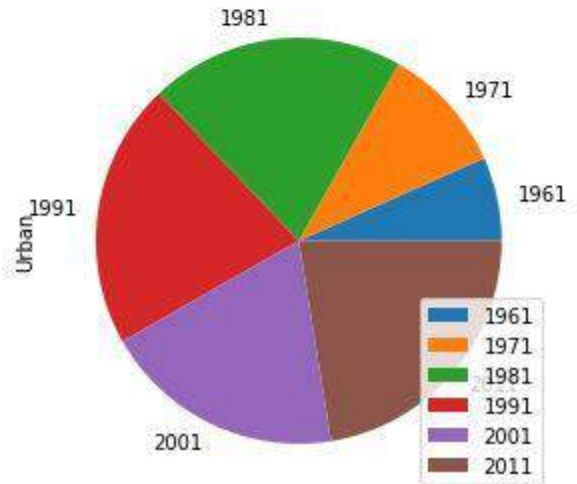
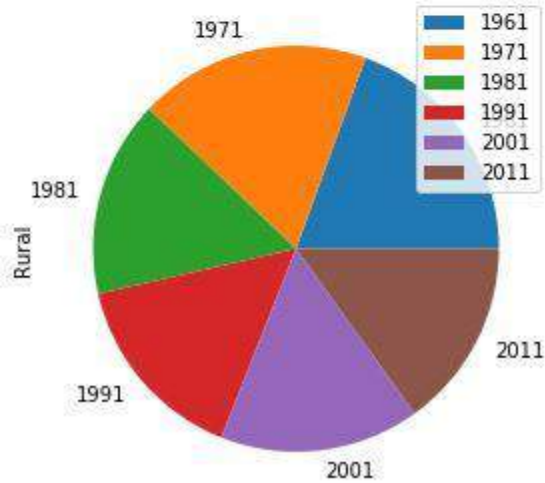
OUTPUT

In [49]: `runfile('F:/untitled1.py', wdir='F:')`

Rural and Urban Population of Manipur



Rural and Urban Population of Manipur percentage w



Male Female Literacy rate of Manipur Literacyrate. CSV

	A	B	C
1	Male	Female	Person
2	45.12	15.93	30.42
3	46.04	19.53	32.91
4	53.29	29.06	41.35
5	71.63	47.6	59.89
6	80.3	60.5	70.5
7	83.58	70.26	76.94
8	69.21	57.67	63.6
9	76.09	63.69	70.05
10	86.97	78.5	82.78
11	77.78	63.96	71.11
12	85.25	76.95	81.35
13	88.77	75.32	81.95
14	92.24	80.17	86.08
15	85.11	66.68	75.85
16	85	64.09	74.47

```
temp.py uliteratepie.py
1 import pandas as pd
2 import matplotlib.pyplot as plt
3 df=pd.read_csv("f:\\literacyrate.csv")
4 Year=[1961,1971,1981,1991,2001,2011,'Senapati', 'Tamenglong', 'Churachandpur',\
5       'Chandel', 'Ukhrul', 'Impphal East', 'Imphal west', 'Bishnupur', 'Thoubal']
6 expl=[0,0.2,0,0.2,0,0.2,0,0.2,0,0.2,0,0.2,0]
7 plot=df.plot.pie(y='Male', labels=Year, autopct="%1.1f%%", figsize=(10,6))
8 plot1=df.plot.pie(y='Female', labels=Year, explode=expl, autopct="%1.1f%%", figsize=(10,6))
9 plot2=df.plot.pie(y='Person', labels=Year, explode=expl, autopct="%1.1f%%", figsize=(10,6))
10
11 plot3=df.plot.pie(subplots=True, labels=Year, explode=expl, autopct="%1.1f%%", figsize=(15,6))
```

Index	Male	Female	Person
0	45.12	15.93	30.42
1	46.04	19.53	32.91
2	53.29	29.06	41.35
3	71.63	47.6	59.89
4	80.3	60.5	70.5
5	83.58	70.26	76.94
6	69.21	57.67	63.6
7	76.09	63.69	70.05
8	86.97	78.5	82.78
9	77.78	63.96	71.11
10	85.25	76.95	81.35
11	88.77	75.32	81.95
12	92.24	80.17	86.08
13	85.11	66.68	75.85
14	85	64.09	74.47

OUTPUT

In [35]: `runfile('C:/Users/pappu/uliteratepie.py', wdir='C:/Use`

