Module-03, Python for Data Analysis

Data Visualization (Plotly and Cufflinks)

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Table of Contents

Plotly

- Plotly is a library that allows we to create interactive plots.
- That we can use in dashboards or websites (we can save them as html files or static images).
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- Cufflinks connects plotly pandas.
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Fake Data One

- Fake Data,

	A	B	C	D
0	0.779645	1.585193	0.608366	-0.384866
1	-0.752416	1.482513	-1.302515	-1.218228
2	0.305855	0.226226	-1.044587	-1.462651
3	0.172883	0.235969	-0.140119	0.684981
4	1.377773	-0.258258	-0.225226	0.954624
...	...	...	...	...
95	-0.385933	-1.063712	-0.344305	-0.436219
96	-2.325169	-0.925098	0.130071	1.755548
97	0.659679	-1.482659	0.634361	1.256144
98	0.619091	0.865509	0.164927	0.222919
99	-0.112240	-1.231000	-0.055238	0.153212

100 rows × 4 columns

- (100,4).

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Fake Data two

- Data set,

	Category	Values
0	A	32
1	B	43
2	C	50

- We have (3,2) size data set

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Using Cufflinks and iplot()

- scatter
- bar
- box
- spread
- heatmap
- surface
- histogram
- bubble

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Coding's Screenshots

- Scatter

```
df.iplot(kind='scatter',x='A',y='B',mode='markers',size=10)
```

- bar plots

```
df2.iplot(kind='bar',x='Category',y='Values')
```

- bar plots

```
df.count().iplot(kind='bar')
```

- boxplots

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df.iplot(kind='box')
```

- Spread

```
df[['A','B']].iplot(kind='spread')
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- Spread

```
df[['A','B']].iplot(kind='spread')
```

- Histogram

```
df['A'].iplot(kind='hist',bins=25)
```

- Bubble

```
df.iplot(kind='bubble',x='A',y='B',size='C')
```

- Scatter-matrix()

```
df.scatter_matrix()
```

Great Job
Thank yo