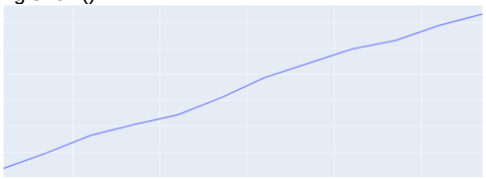
PLOTLY VISUALIZATION CHEAT SHEET

The Plotly **Python** library is an interactive, open-source plotting library that supports over 40 unique chart types covering a wide range of statistical, financial, geographic, scientific, and 3-dimensional use-cases. Plotly enables Python users to create beautiful interactive web-based visualizations.

1. BASIC CHARTS

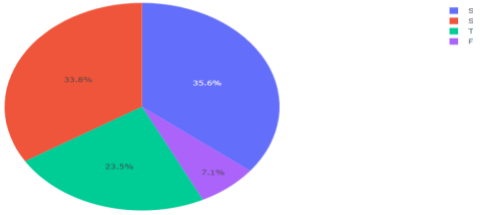
a. Line Chart

```
import plotly.express as px
df = pd.read_csv(filename.csv)
fig = px.line(df, x, y,)
fig.show()
```



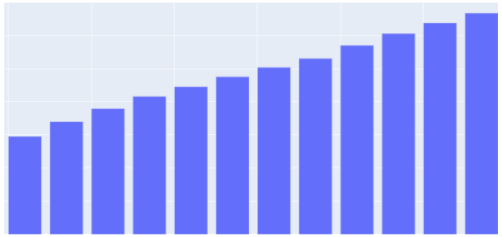
b. Pie Chart

```
fig = px.pie(df, values='x', names='y')
fig.show()
```



c. Bar Chart

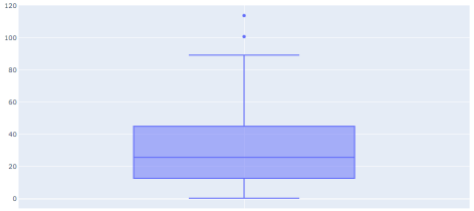
```
fig = px.bar(df, x, y)
fig.show()
```



2. STATISTICAL CHARTS

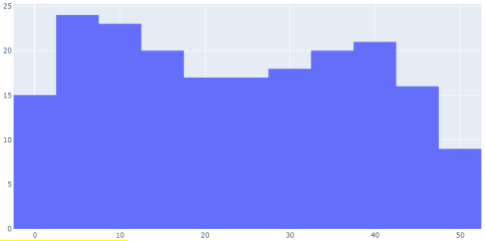
a. Box Plots

```
fig = px.box(df, y="column_name")
fig.show()
```



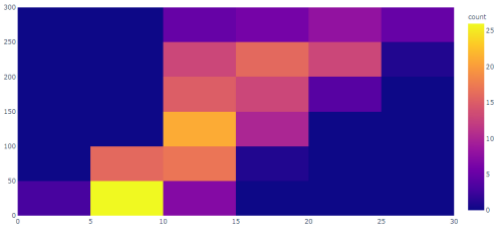
b. Histogram

```
fig = px.histogram(df, x="column_name")
fig.show()
```



c. Heatmaps

```
fig = px.density_heatmap(df, x,, y)
fig.show()
```



3. FINANCIAL CHARTS

a. OHLC Charts

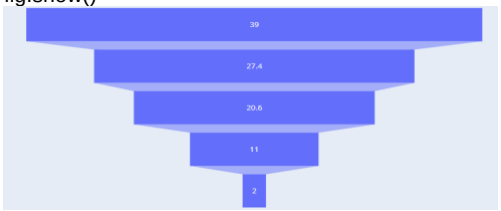
```
import plotly.graph_objects as go
fig = go.Figure(data=go.Ohlc(x=df['Date'],
                open=df['Open'],
                high=df['High'],
                low=df['Low'],
                close=df['Close']))
fig.show()
```

b. Candlestick Charts

```
fig = go.Figure(data=go.Candlestick(x=df['Date'],
                open=df['Open'],
                high=df['High'],
                low=df['Low'],
                close=df['Close']))
fig.show()
```

c. Funnel Charts

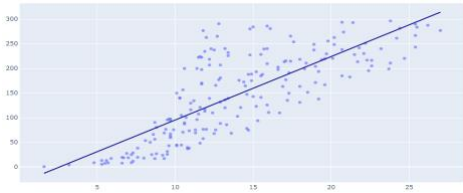
```
fig = px.funnel(data, x='number', y='stage')
fig.show()
```



4. MACHINE LEARNING VISUALIZATION

a. OLS Regression

```
fig = px.scatter(  df, x, y, trendline='ols')
fig.show()
```



b. PCA Visualization

```
fig = px.scatter_matrix( df,  dimensions=features)
fig.update_traces()
fig.show()
```

c. Prediction Error Analysis

```
fig = px.scatter(df, x, y, marginal_x='histogram',
marginal_y='histogram', trendline='ols')
fig.update_traces(histnorm='probability',
selector={'type':'histogram'})
fig.add_shape(type="line", line=dict(dash='dash')
fig.show()
```