Plotly Live Graph

In [1]:
```python
import dash
from dash.dependencies import Output, Input
import dash_core_components as dcc
import dash_html_components as html
import plotly
import random
import plotly.graph_objs as go
from collections import deque
import time
import psutil
```

In [2]:
```python
X = deque(maxlen = 20)
X.append(1)

Y = deque(maxlen = 20)
Y.append(1)

app = dash.Dash(__name__)

app.layout = html.Div(
    [
        dcc.Graph(id = 'live-graph', animate = True),
        dcc.Interval(
            id = 'graph-update',
            interval = 1000,
            n_intervals = 0
        ),
    ]
)

@app.callback(
    Output('live-graph', 'figure'),
    [ Input('graph-update', 'n_intervals') ]
)

def update_graph_scatter(n):
    X.append(X[-1]+1)
    Y.append(Y[-1]+Y[-1] * random.uniform(-0.1,0.1))

    data = plotly.graph_objs.Scatter(
            x=list(X),
            y=list(Y),
            name='Scatter',
            mode= 'lines+markers'
    )

    return {'data': [data],
            'layout' : go.Layout(xaxis=dict(range=[min(X),max(X)]),yaxis = dict(range = [min(Y),max(Y)]),)}


if __name__ == '__main__':
        app.run_server()
```

```
Dash is running on http://127.0.0.1:8050/

 * Serving Flask app "__main__" (lazy loading)
 * Environment: production
   WARNING: This is a development server. Do not use it in a production deployment.
   Use a production WSGI server instead.
 * Debug mode: off
 * Running on http://127.0.0.1:8050/ (Press CTRL+C to quit)
127.0.0.1 - - [08/Jul/2021 09:48:01] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:01] "GET /_dash-layout HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:01] "GET /_dash-dependencies HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:01] "POST /_dash-update-component HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:02] "POST /_dash-update-component HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:03] "POST /_dash-update-component HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:04] "POST /_dash-update-component HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:05] "POST /_dash-update-component HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:06] "POST /_dash-update-component HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:07] "POST /_dash-update-component HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:10] "POST /_dash-update-component HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:10] "POST /_dash-update-component HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:12] "POST /_dash-update-component HTTP/1.1" 200 -
127.0.0.1 - - [08/Jul/2021 09:48:12] "POST /_dash-update-component HTTP/1.1" 200 -
```