In [1]:
```
import yfinance as yf
import pandas as pd
%matplotlib inline

import chart_studio
import chart_studio.plotly as py
chart_studio.tools.set_credentials_file(username='vkinvest', api_key='

import plotly.graph_objs as go
```

In [2]:
```
df = pd.read_excel ('/Users/vl/Desktop/python/1 python for finance 2/v
```

In [3]:
```
pl = df.loc[ df["Data provided by SimFin"]=='Profit & Loss statement']
pl
```

Out[3]: 1

In [4]:
```
cf = df.loc[df['Data provided by SimFin'] =='Cash Flow statement'].ind
cf
```

Out[4]: 84

In [5]:
```
bs = df.loc[df['Data provided by SimFin'] =='Balance Sheet'].index[0]
bs
```

Out[5]: 30

In [6]:
```
pl = df.iloc[2:29, 1:]
pl.columns = pl.iloc[0]
pl.set_index('in million USD', inplace = True)
pl.fillna(0,inplace=True)
pl = pl[1:]
```

In [7]:
```
#remember to do pl.T to transpose pl
# for pl['Total revenues'].plot()
```

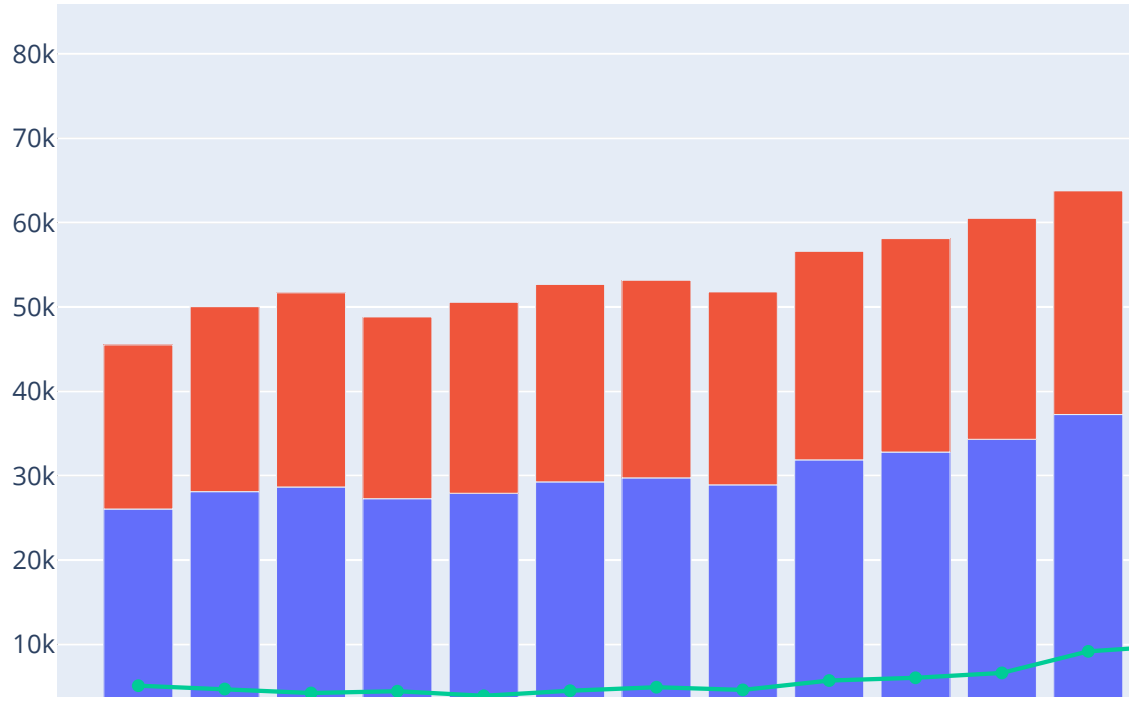
In [8]:
```
bs = df.iloc[31:85, 1:]
bs.columns = bs.iloc[0]
bs.set_index('in million USD', inplace = True)
bs.fillna(0,inplace=True)
bs = bs[1:]
bs = bs.T
```

In [9]:
```
cf = df.iloc[85:, 1:]
cf.columns = cf.iloc[0]
cf.set_index('in million USD', inplace = True)
cf.fillna(0,inplace=True)
cf = cf[1:]
```

In [10]:
```
pl.to_csv ('TSLA Q_pl.csv')
bs.to_csv ('TSLA Q_bs.csv')
cf.to_csv ('TSLA Q_cf.csv')
```

In [11]:
```
assets = go.Bar(
    x =bs.index,
    y =bs['Total assets'],
    name  = 'Total assets'
)

liabilities = go.Bar(
    x =bs.index,
    y =bs['Total liabilities'],
    name ='Total liabilities'
)

stockholders_equity = go.Scatter(
    x =bs.index,
    y =bs["Total stockholders' equity"],
    name = "Total stockholder' equity"
)

data = [assets,liabilities,stockholders_equity]
layout = go.Layout(barmode="stack")

fig_bs = go.Figure(data=data, layout=layout)
py.iplot(fig_bs, filename='')
```

Out[11]:



EDIT CHART

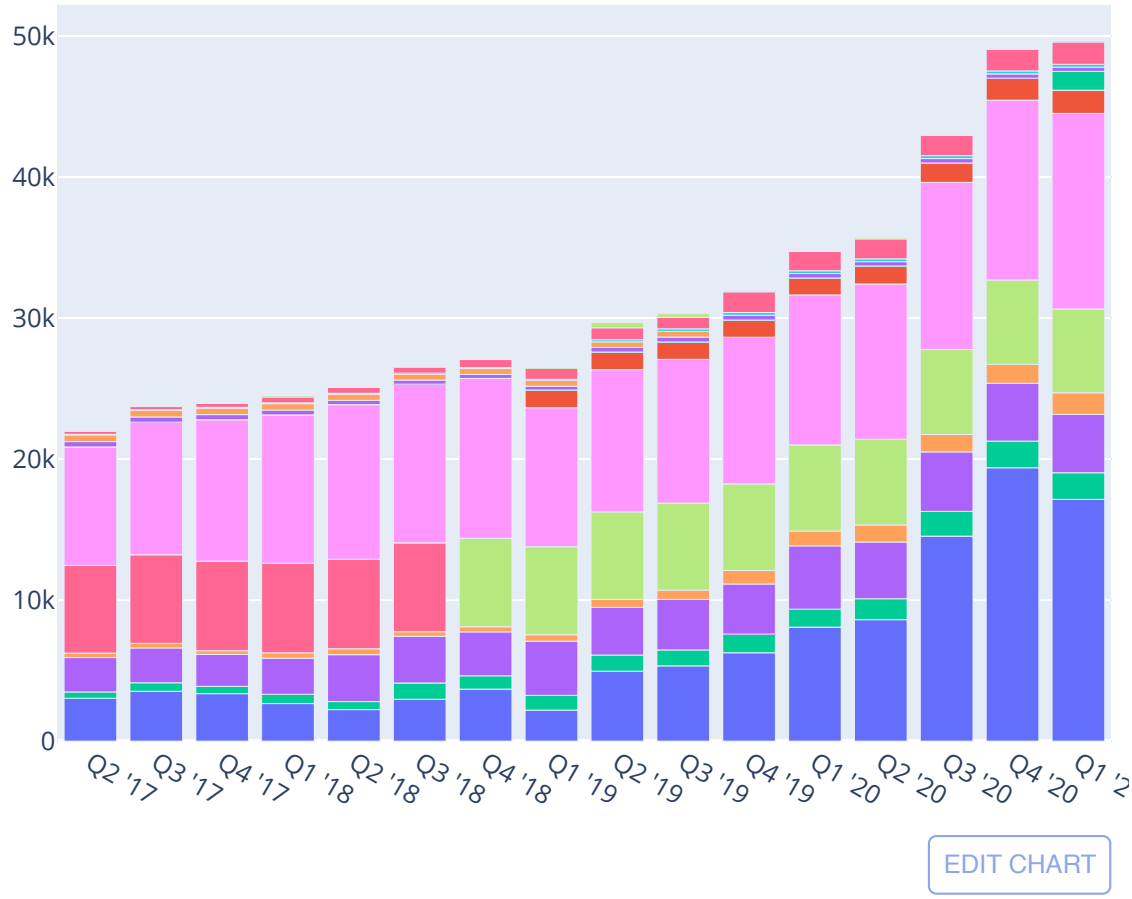
In [12]:
```
asset_iterm = '''
Cash and cash equivalents
Restricted cash
Accounts receivable
Inventory
Prepaid expenses and other current assets
Operating lease vehicles, net
Operating lease, net, Solar Energy Systems
Solar energy systems, net
Property, plant and equipment, net
Operating lease vehicles, net
Restricted cash
Operating lease right-of-use assets
Digital assets, net
Intangible assets, net
MyPower customer notes receivable, net of current portion
Goodwill
Other assets
Restricted cash, net of current portion
'''
# orgenize lists
assets_columns = [x for x in asset_iterm.strip().split('\n')]
assets_columns
```

Out[12]:
```
['Cash and cash equivalents',
 'Restricted cash',
 'Accounts receivable',
 'Inventory',
 'Prepaid expenses and other current assets',
 'Operating lease vehicles, net',
 'Operating lease, net, Solar Energy Systems',
 'Solar energy systems, net',
 'Property, plant and equipment, net',
 'Operating lease vehicles, net',
 'Restricted cash',
 'Operating lease right-of-use assets',
 'Digital assets, net',
 'Intangible assets, net',
 'MyPower customer notes receivable, net of current portion',
 'Goodwill',
 'Other assets',
 'Restricted cash, net of current portion']
```

In [13]:
```
# one way to a chart, not the best
# bs[assets_columns].plot()
```

In [14]:
```
asset_list = []
columns = asset_iterm

for col in columns.strip().split("\n"):
    asset_bar = go.Bar(
        x = bs.index,
        y = bs[col],
        name = col
    )

    asset_list.append(asset_bar)

layout_assets = go.Layout(
    barmode = 'stack'
)

fig_bs_assets = go.Figure(data = asset_list, layout = layout_assets)
py.iplot(fig_bs_assets, filename = 'Total Assets Breakdown')
```

Out[14]:



In [ ]: