

In [1]:

```
import pandas as pd
import matplotlib.pyplot as plt
from matplotlib import pyplot
import numpy as np
```

In [2]:

```
pip install openpyxl
```

Requirement already satisfied: openpyxl in c:\users\sigma\anaconda3\lib\site-packages (3.0.9)

Requirement already satisfied: et-xmlfile in c:\users\sigma\anaconda3\lib\site-packages (from openpyxl) (1.1.0)

Note: you may need to restart the kernel to use updated packages.

In [4]:

```
df=pd.read_excel(r'D:\Derivatives Trading\DeriP.xlsx')
```

In [5]:

```
sample_timeseries_data ={'Date':df["Date"], 'PnL':df["PnL"], 'VIX':df["VIX"]}
```

In [6]:

```
dataframe = pd.DataFrame(
    sample_timeseries_data, columns=[
        'Date', 'PnL', 'VIX'])

dataframe["Date"] = dataframe["Date"].astype("datetime64")
dataframe = dataframe.set_index("Date")
dataframe
```

Out[6]:

	PnL	VIX
Date		
2021-07-18	100.000000	18.54
2021-07-19	99.665769	20.81
2021-07-20	99.308846	23.24
2021-07-21	98.399615	22.53
2021-07-22	99.265000	20.54
...	...	...
2022-04-18	99.716538	20.89
2022-04-19	100.128462	19.16
2022-04-20	101.051538	18.59
2022-04-21	101.797692	17.35
2022-04-22	100.030385	17.71

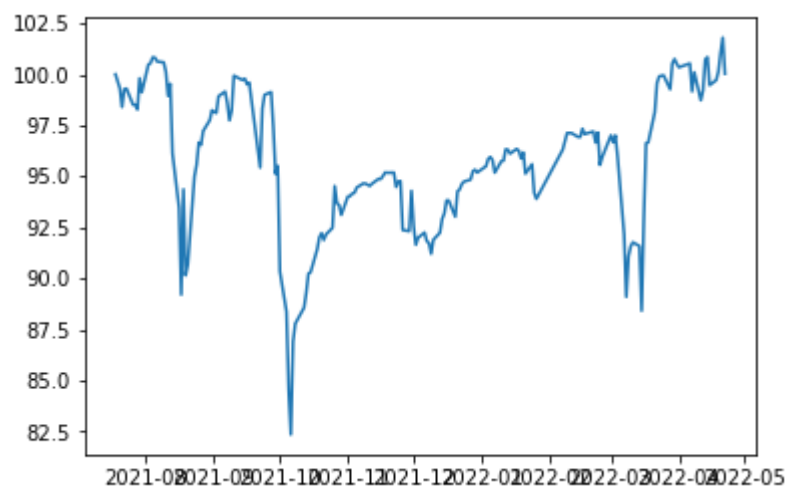
187 rows × 2 columns

In [7]:

```
plt.plot(dataframe["PnL"])
```

Out[7]:

[&lt;matplotlib.lines.Line2D at 0x2524e914cd0&gt;]

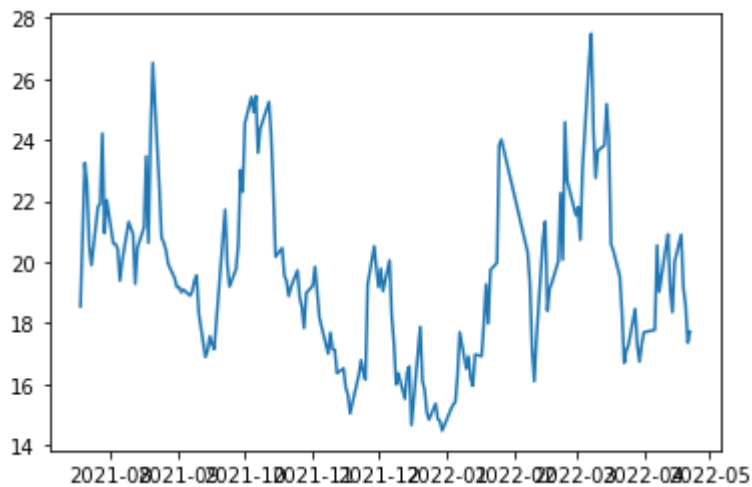


In [8]:

```
plt.plot(dataframe["VIX"])
```

Out[8]:

```
[<matplotlib.lines.Line2D at 0x252500fd5e0>]
```



In [9]:

```
x= df["Date"]
y1 =df["PnL"]
y2 = df["VIX"]

fig, ax1 = plt.subplots()
ax2 = ax1.twinx()
ax1.plot(x, y1, 'royalblue')
ax2.plot(x, y2, 'violet')

ax1.set_xlabel('Date')
ax1.set_ylabel('PnL (Index: Base = 100)', color='royalblue')
ax2.set_ylabel('VIX', color='violet')
plt.show()
```

