```
import statistics as stats
from pandas import *
from pandas_datareader import data
from matplotlib.pyplot import *
set_option ("display.max_rows", 20000)
set_option ("display.max_columns", 1000)
set_option ("display.width", 1000)

time_period = 20   # number of days over which to average
history = []
sma_values = []

start_date = "2014-01-01"
end_date = "2020-02-22"
google_data = data.DataReader( "GOOG", "yahoo", start_date, end_date )
close = pandas.DataFrame(index=google_data.index).fillna(0.0)
close ["close"] = google_data ["Adj Close"]


for close_price in close ["close"]:
    history.append(close_price)
    if len (history) <= time_period-1:  # because we only average over last
"time_period" prices
        sma_values.append(None)
    elif len(history) == time_period:
        x = stats.mean(history)
        sma_values.append(x)
        history.clear()

google_data = google_data.assign (Simple20DayMovingAverage = Series (sma_values,
index=google_data.index)).ffill (axis=0)
print (google_data)

fig = figure()
ax1 = fig.add_subplot (111, ylabel="Google price in $")
google_data ["Adj Close"].plot (ax=ax1, color="g", lw=2., legend=True)
google_data ["Simple20DayMovingAverage"].plot (ax=ax1, color="r", lw=2.,
legend=True)
show ()
```