Step 1: Gathering Data

I started by grabbing two excel datasets, one dataset following the inflation rate since 1993 and another following the performance of the SPDER S&P 500 ETF since its inception in 1993.

Step 2: Format Conversion & upload to MySQL

Both files needed to be converted from Excel format to CSV to use them on MySQL

Uploaded both files

Step 3: Joining data

Now to answer the question of correlation between Inflation rates and the performance of the S&P 500, I need to join both tables into a single table. In order to join these tables and keep the a single column for the Year’s I used this SQL query

CREATE TABLE joined AS

(SELECT SPY.\*,

INFLATION.Rate

FROM SPY

INNER JOIN INFLATION

ON SPY.Year = INFLATION.Year);

Step 4:

Now I must connect Tableau to MySQL server to visualize my tables. This requires a specific Driver download that is specific to your computers operating system.

Step 5: Visualize using Tableau

Using the *joined* table, I can visualize a dual line chart to visually see the correlation or lack thereof between the price of SPY and the rate of inflation.

Step 6: Revealing my findings

Chart, line chart

Description automatically generatedChart, line chart

Description automatically generated

We can see that the price of SPY(blue) has increased over time independent of the inflation rate(orange), but as the inflation rate spiked in 2021 SPY followed it up to new heights and has recently plateaued while the inflation rate insists on rising higher.

Based on recent trends I would say that SPY and the inflation rate are somewhat positively correlated, but only time will tell.