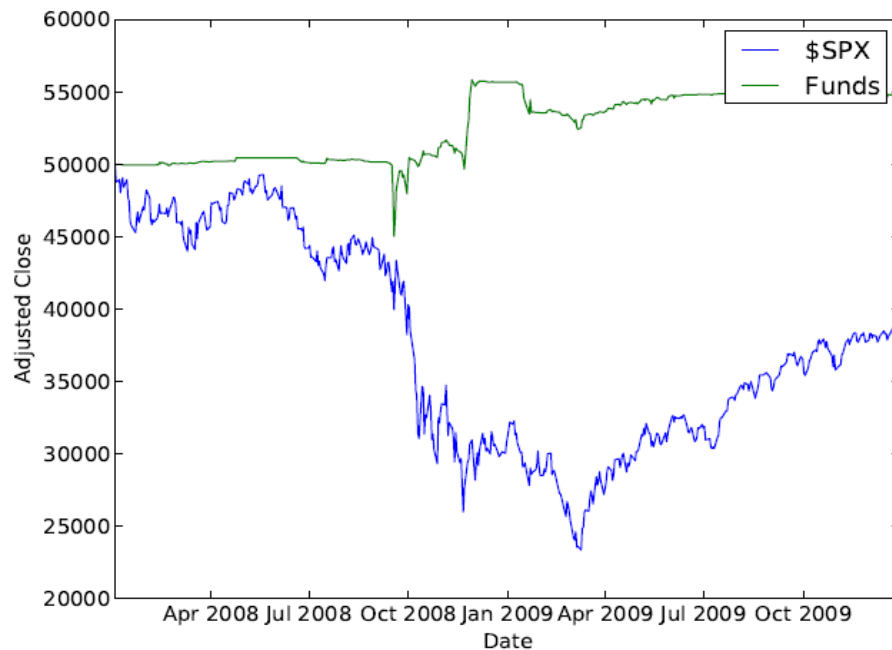


Student Name – Aishvarya Krishnan
Course Name – CS 7646 Machine Learning for Trading
Assignment Name – CompInvesti Homework 4

5 Dollar event

Chart



Numerical results

```
C:\Python27>python analyze.py values.csv \SPX
```

The final value of the portfolio using the sample file is -- 2009, 12, 28, 5
4824.0

Details of the Performance of the portfolio

Data Range : 2008-01-03 16:00:00 to 2009-12-28 16:00:00

Sharpe Ratio of Fund : 0.527865227084

Sharpe Ratio of \$SPX : -0.184202673931

Total Return of Fund : [1.09648]

Total Return of \$SPX : [0.77930567]

Standard Deviation of Fund : 0.0060854156452

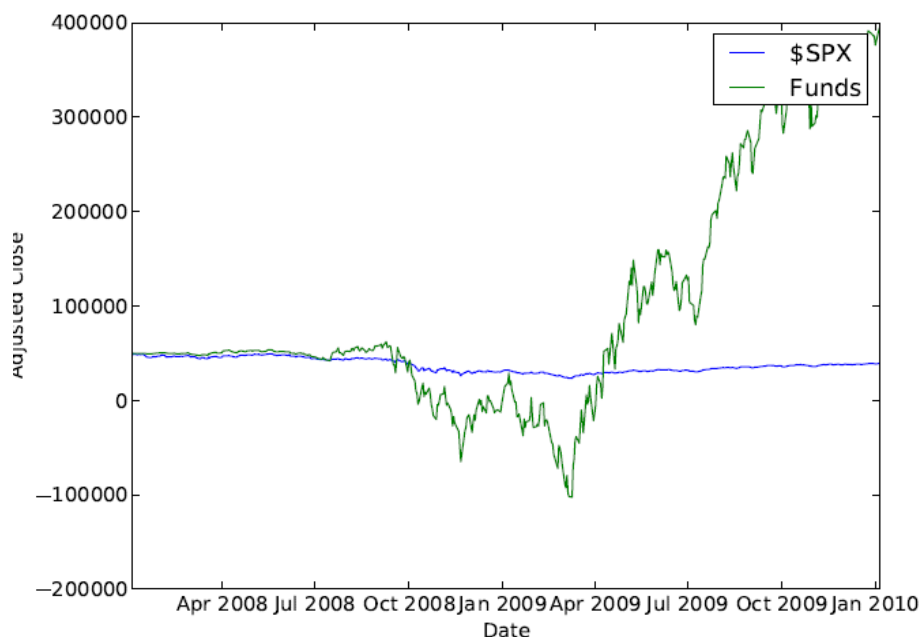
Standard Deviation of \$SPX : 0.022004631521

Average Daily Return of Fund : 0.000202354576186

Average Daily Return of \$SPX : -0.000255334653467

My Event - \$15

Chart



Numerical results

C:\Python27>python analyze.py values1.csv \SPX

The final value of the portfolio using the sample file is -- 2009, 12, 30, 70311.0

Details of the Performance of the portfolio

Data Range : 2008-01-03 16:00:00 to 2009-12-30 16:00:00

Sharpe Ratio of Fund : 0.60300447538

Sharpe Ratio of \$SPX : -0.18556812555

Total Return of Fund : [1.40622]

Total Return of \$SPX : [0.7783659]

Standard Deviation of Fund : 0.0281210801886

Standard Deviation of \$SPX : 0.0219609097257

Average Daily Return of Fund : 0.00106819923798

Average Daily Return of \$SPX : -0.000256716295552

Event Description

I observed the charts for various stocks and noticed that there are many occurrences of events wherein the price is falling from above \$15 to below \$15 over a day. Hence, I decided to select the event such that $\text{price_yesterday} \geq \15 and $\text{price_today} < \$15$. Since over a period of two years there are close to 900 occurrences of this event and it renders a good sharpe ratio with low standard deviation this is a good long term investment.