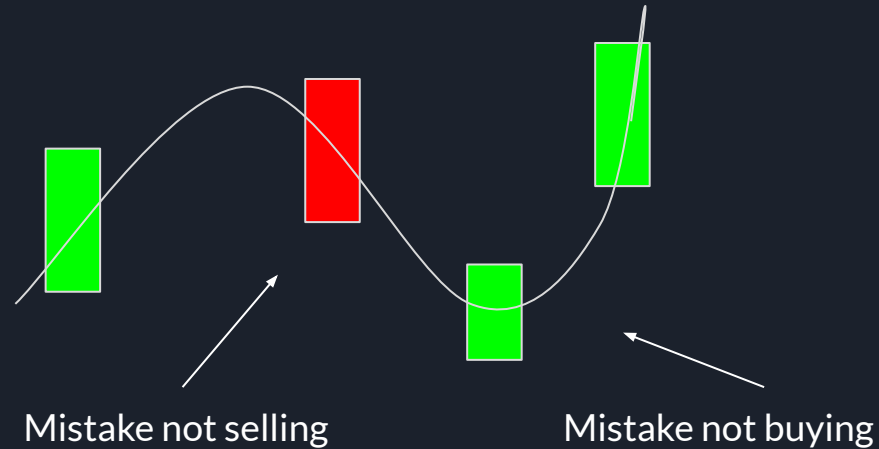# Team SixteenFourtySeven

Aryaman Sharma   Jason Ng   Jacky Xie   Utkarsh Sharma

Investment Philosophy

- "A mistake is not something to be determined after the fact, but in light of the information available until that point" - Nassim Nicholas Taleb

Mistake not selling
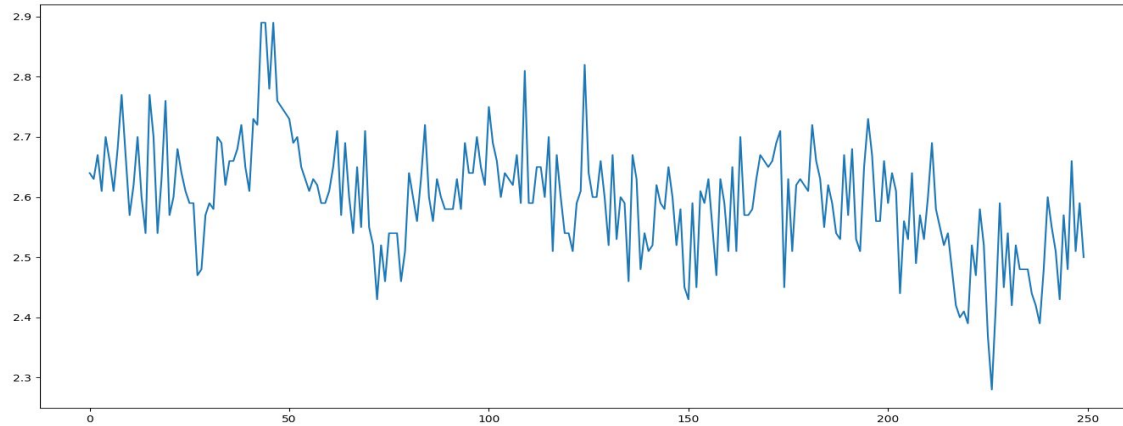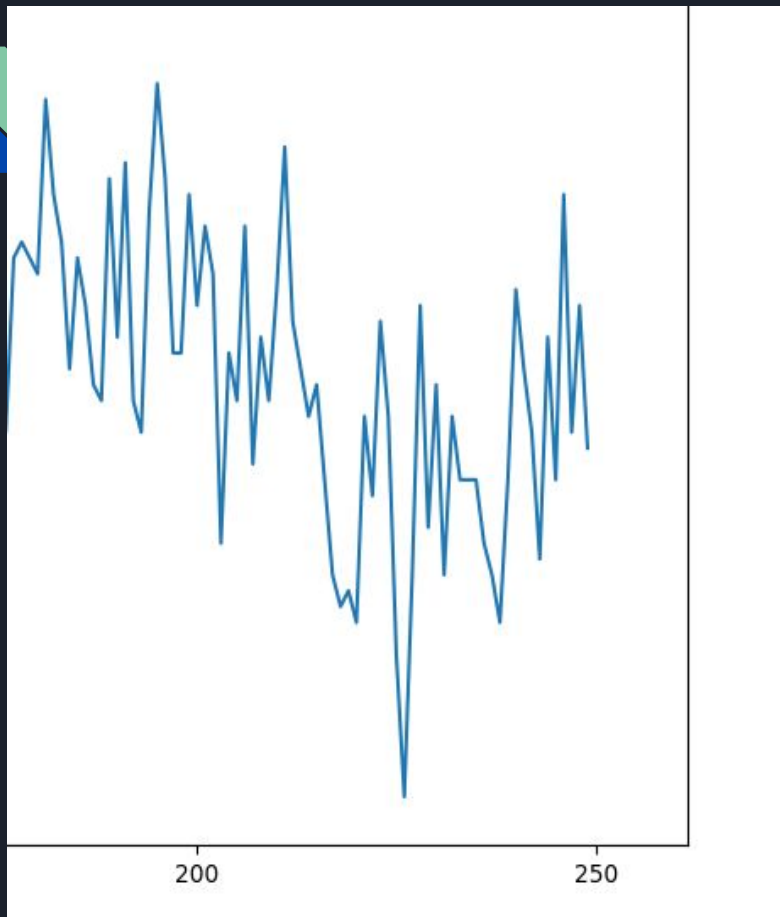
Mistake not buying

Investment hypothesis

Identify a medium term (50 day) actual price of the stock and take advantage of fluctuations from the calculated price.
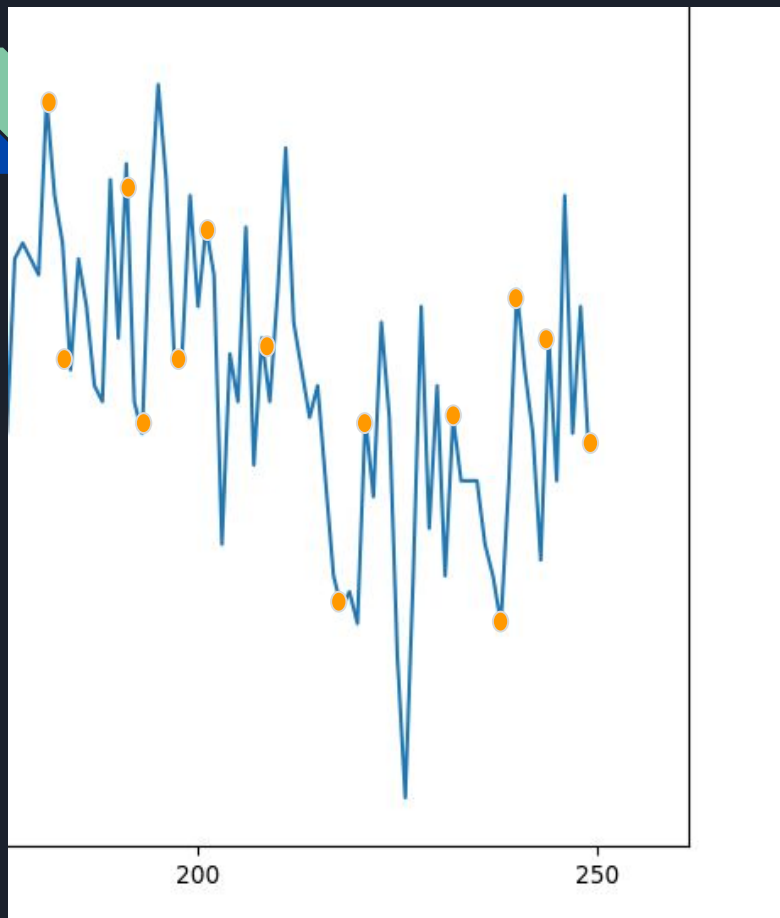
Strategy 98

- Inspired from convergence of monte carlo simulation methods.
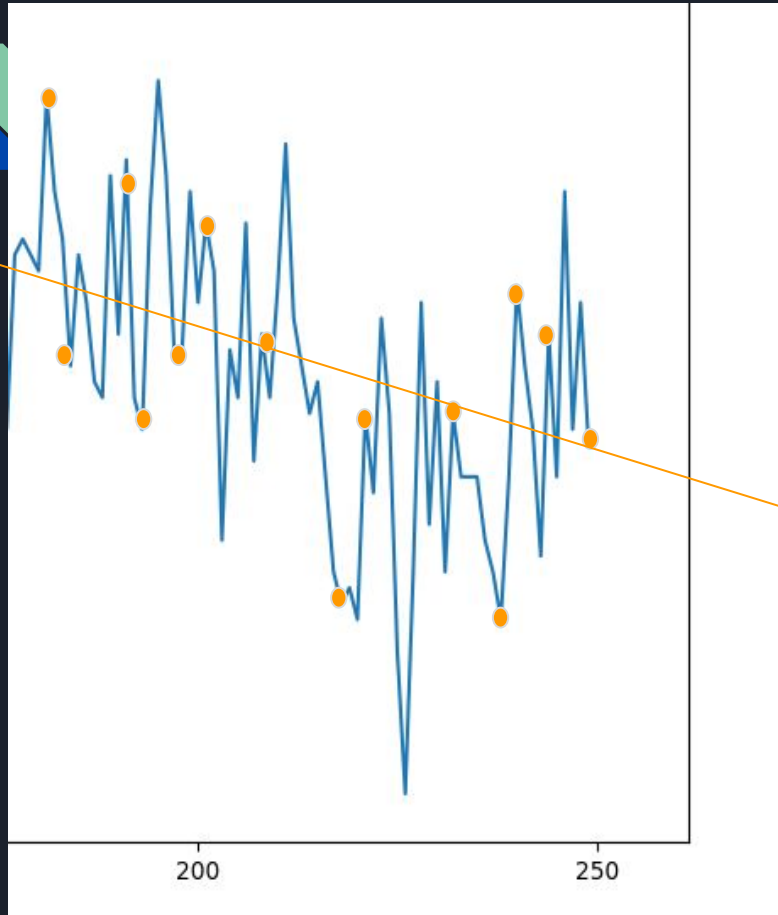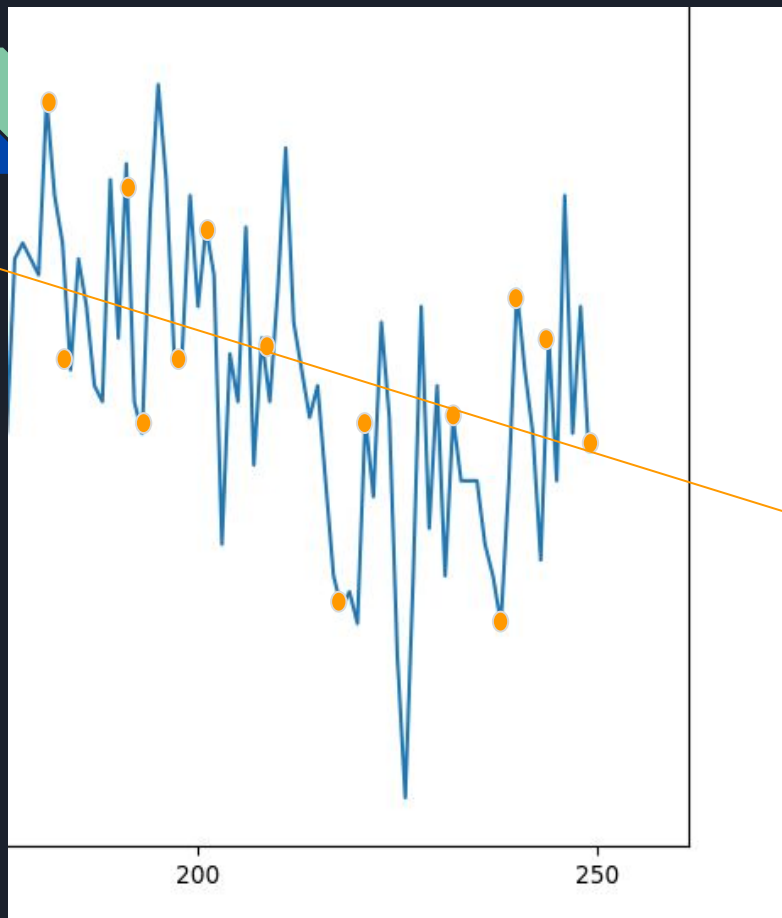- Example working on stock #98

1. Start off by collecting data for last 50 days

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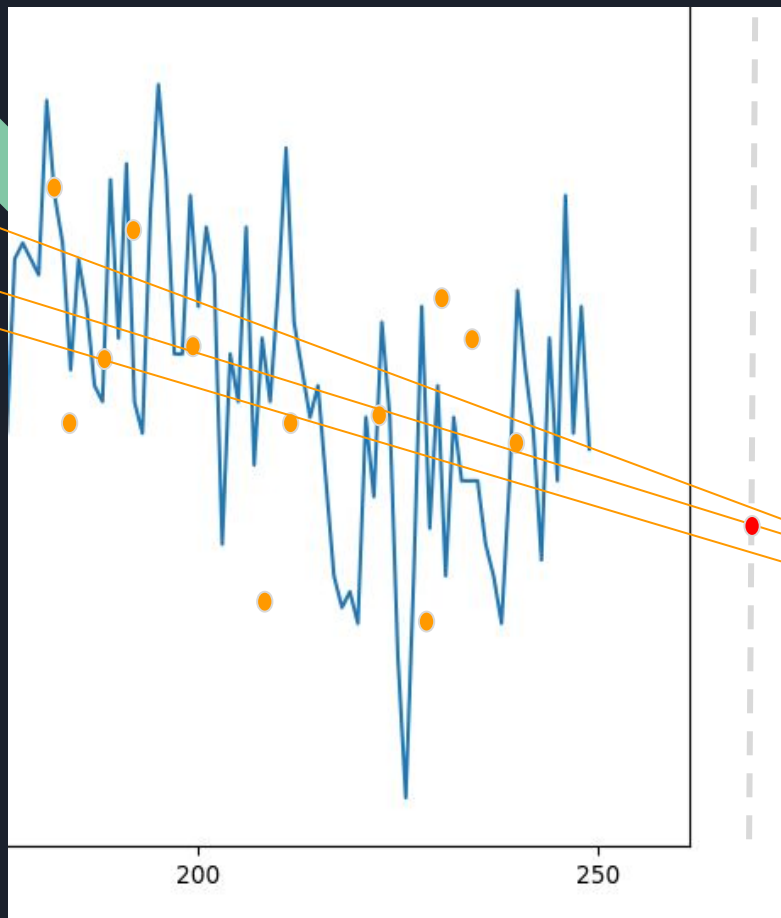2. Randomly select x points from the set

1. Start off by collecting data for last 50 days
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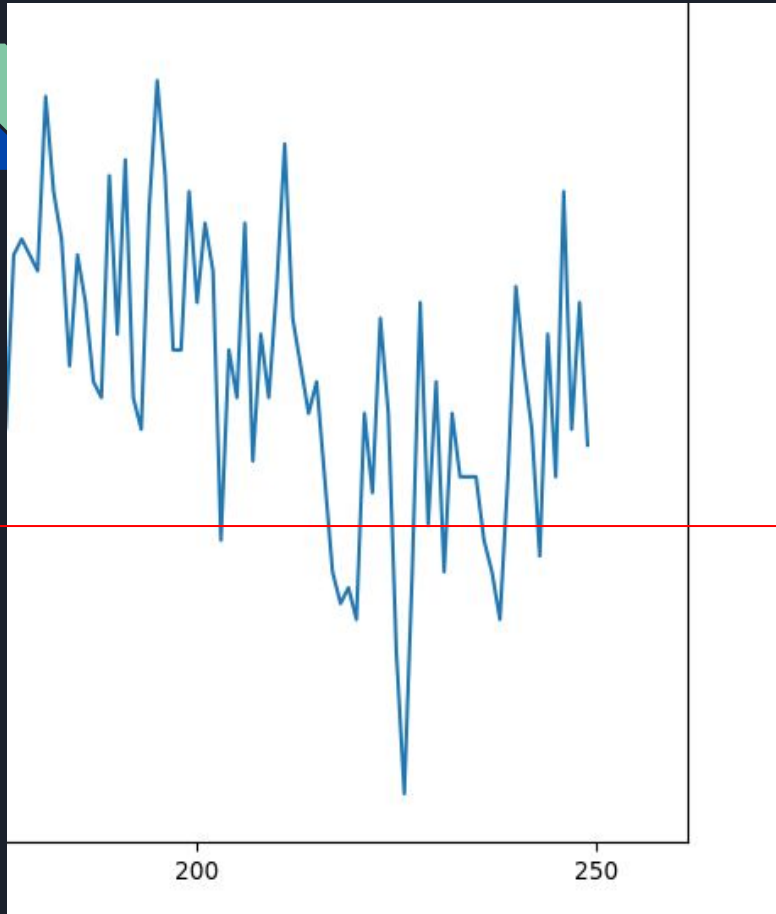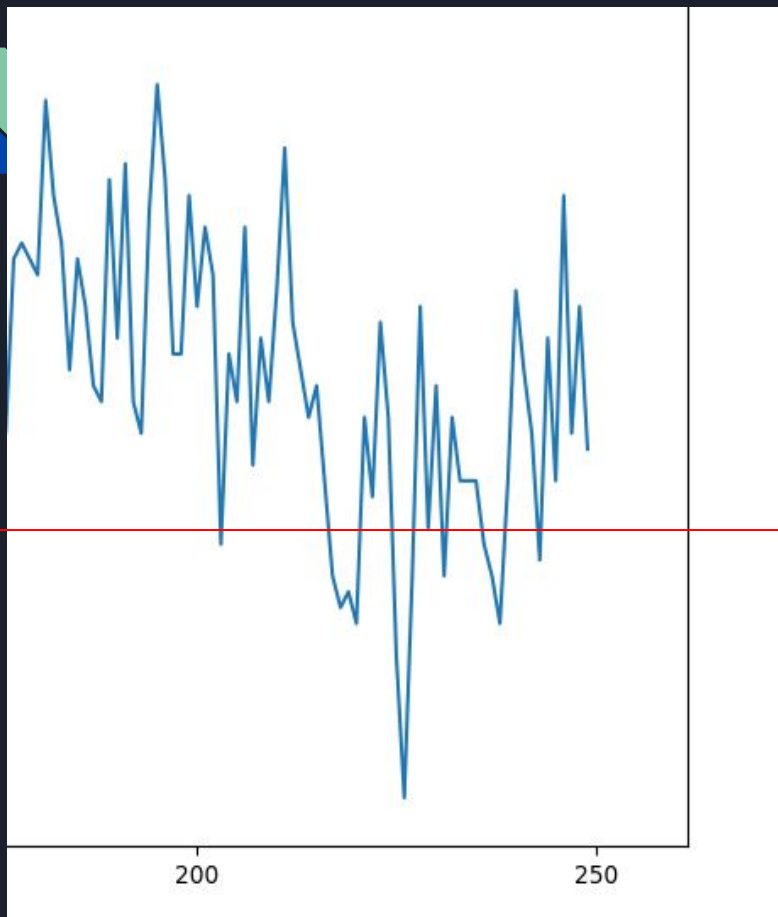5. Simulate multiple sequences and convergence point = mean of convergence points of all sequences

1. Start off by collecting data for last 50 days
2. Randomly select x points from the set
3. Fit a first order regression
4. Find its value at a point in the future
5. Simulate multiple sequences and convergence point = mean of convergence points of all sequences
6. Take the red line as the actual price of the stock and trade
   a. If price > (1+commRate) * convergence we expect stock price to drop in the future and short sell
   b. If price < (1-commRate) * convergence we expect price to increase in the future and buy.
   c. Else don't change position for the asset

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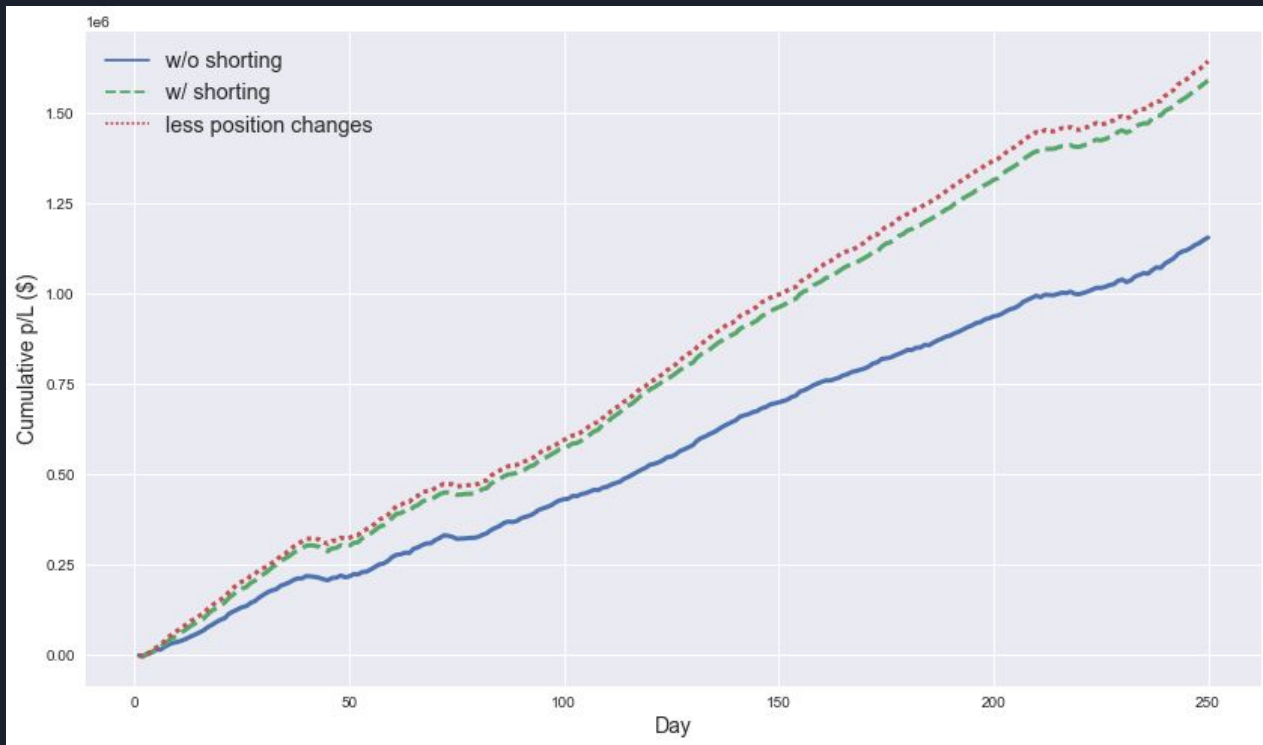7. Have a dynamic convergence by allowing new 50-day trends.

Note: We go long/short the position limit ($10000)

Trading Decision

```python
if new_price < (1 - commRate) * cnvg:   # go long
    rpos[i] = posLimit // new_price
elif new_price > (1 + commRate) * cnvg:   # go short
    rpos[i] = -posLimit // new_price
else:
    rpos[i] = currentPos[i]   # no change
```

Results

Thank you