After zeroing in on the pairs of stock to use from the main Capital Goods Industry and related Power (Utilities) Industry, I will follow the below steps for my trading period of next 6 months.

- Calculate the spread as → Spread = s = log(a) nlog(b)
  I am using log prices so as to maintain values and not quantity if I had used simple prices.
- Calculate z-score of the spread 's', using rolling mean and standard deviation for a time period of 't' intervals. Save this as z.  $\rightarrow$  z = (x mean) / standard deviation, where x is the data point.
- Define Threshold as 2 SD.
- Entry Points:

When z-score crosses upper threshold, Sell Stock A & Buy Stock B (go Short) When z-score crosses lower threshold, Buy Stock A & Sell Stock B (go Long)

- Exit Points:
  - Stop Loss At 3 SD, stop trading as spread has continued to increase and we would incur losses as our assumption of prices converging is invalidated.
  - Co-Relation Check for correlation value while trading too, if the 2 pairs are no longer moving in the same direction, we need to keep an eye as to whether to cut the positions or not
  - Take Profit According to the hypothesis, Spread should return to mean or 0. We can stop trading when the spread crosses 0 for the first time after coming back from threshold levels.