My Crypto Bank Array Game

(testing out a crypto day trading strategy – but all done in an array)

**INCLUDE**: coinbase code for ticks python code

There are 5 array parts

1. The bank\_array holds the balance of coins purchased – from each crypto
2. The tick\_data array contains 100 ticks for each crypto (price of their coin – every second – for 100 seconds)
3. The crypto\_list\_array contains a list of all the cryptos to buy
4. The transfer\_fees\_array – has how much fees will be – to simulate reality (when buying/selling) – (20 cents, 5 cents, 1 cent)
   1. … if you transfer to a stable-coin like USD – on coinbase – they charge more of a fee – 20 cents versus 1 or 5 cents … if you transfer it to another crypto. There is more loss when sending to a stable-coin. There is less loss when sending to another crypto – or “swapping cryptos” as I call it – on coinbase.com
5. The price\_array – this one gets adjusted by the tick data – that comes in. It has price of coin, num\_coins, ***total\_dollar\_value***.
   1. You can set it up price[time 1-100][COIN] or price[COIN][time 1-100] … any way that makes sense

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The game is played here…

**Based on** the ***total\_dollar\_value*** – after each tick, you will take action & sell or swap it’s num\_coins to the bank & pay a small fee.

Hereis a Table of - WHAT TO DO - when the price goes UP/DOWN– every tick, as it affects that crypto’s balance ($10 starting buy balance for each crypto):

|  |  |
| --- | --- |
| **If it goes UP** | **If it goes DOWN** |
| When  Gain >= 25 cents  **Take Action**  -It looks like-:  *Since we start at buying $10 exactly worth of their coin …*  If balance goes UP past $10, to $10.25*+ ( or more )*  **Take Action**  More info:  If price\_total >= $10.25:  Shave off the $25+ cents – swap the 25c and recalculate the num\_coins (in price\_array)  (it will be slightly less coin amount)  Swap it into your bank\_array – to the safest\_crypto=USD (“TETHER”)  Update the num\_coins for tether  safest\_crypto … can be replaced by another one like “ETH” or “BTC” whatever is most stable that day.  -also handle paying for the transfer fee | When  Lose >= 5 cents  **Take Action**  -It looks like-:  *Since we start at buying $10 exactly worth of their coin …*  If that balance goes DOWN past $10, to $9.95 *(or less)*  **Take Action**  More info:  When it drops 5 cents from the high it reaches going up  high\_so\_far = current\_high\_price  if price\_drops(5 cents) # from high\_so\_far    -also handle paying for the transfer fee |

That’s all I have so far