**IN THE NAME OF GOD**

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**Chart Box Test Project:**

**When I try to receive last year data, yfinance library can’t do this task and give me below message:**

“15m data not available for startTime=1651823721 and endTime=1683359721. The requested range must be within the last 60 days.”

For this reason, I use last 60day data for this project with interval = "15m"

Or we can get 1 year data with interval = "1h"

**RSI Formula**

* **RSI = 100 – 100 / ( 1 + RS )**
* RS = Relative Strength = AvgU / AvgD
* AvgU = average of all up moves in the last N price bars
* AvgD = average of all down moves in the last N price bars
* N = the period of RSI
* There are 3 different commonly used methods for the exact calculation of AvgU and AvgD (see details below)

**RSI Calculation Step by Step**

1. Calculate up moves and down moves (get U and D)
2. Average the up moves and down moves (get AvgU and AvgD)
3. Calculate Relative Strength (get RS)
4. Calculate the Relative Strength Index (get RSI)

**Output of Written Code(**period="60d", interval="15m"**):**

**Log in .......**

**Open 1.944150e+02**

**High 1.949800e+02**

**Low 1.886100e+02**

**Close 1.923800e+02**

**Volume 2.397392e+07**

**Dividends 0.000000e+00**

**Stock Splits 0.000000e+00**

**Name: 2023-02-13 09:30:00-05:00, dtype: float64**

**Log out .......**

**Open 1.941400e+02**

**High 1.944900e+02**

**Low 1.937100e+02**

**Close 1.939800e+02**

**Volume 3.188401e+06**

**Dividends 0.000000e+00**

**Stock Splits 0.000000e+00**

**Name: 2023-02-13 14:45:00-05:00, dtype: float64**