

PSEUDOCODE

Module: TradingSystem

Class: Trader

Inherit the classes Algorithm and RinaCsvGenerate publically.

Member Function: __init__

1. Initialize UserName='Username'
2. Initialize Password='Password'
3. Initialize DbName=Initialise 'DatabaseName'
4. Initialize TrainingDataTable='TraininngDataTableName'
5. Initialize SignalTable='SignalTableName'.
6. Initialize RinaFileName

Member Function: Login(UserName,Password,DbName)

Purpose: Login into database

1. Login into database using Username and Password

Member Function: CreateDbTable

Purpose: Create input and output tables.

1. If tbl_USDTrainingData doesn't exist, create table tbl_USDTrainingSignals.
2. Else delete data from tbl_USDTrainingData.
3. If tbl_TrainingSignals doesn't exist, create table tbl_TrainingSignals.
4. Else delete data from tbl_TrainingSignals.
5. If tbl_TrainingResults doesn't exist, create table tbl_TrainingResults.
6. Else delete data from tbl_TrainingResults.
7. Load data fromUSD1min.csv to tbl_USDTrainingdata.

Member Function: CreateOhlc(OneMinuteDataMatrix)

1. OHLCMatrix(open)=RoundedoffTo2Digits(OneMinuteDataMatrix(start,open))
2. OHLCMatrix(close)=RoundedoffTo2Digits(OneMinuteDataMatrix(end,close))
3. OHLCMatrix(high)=RoundedoffTo2Digits(Max(Open(OneMinuteDataMatrix(start:end,close))))

4. OHLCMatrix(low)=RoundedoffTo2Digits(Min(OneMinuteDataMatrix(start:end, close)))
5. OHLCMatrix(date)=OneMinuteDataMatrix(start:end,date)
6. OHLCMatrix(time)=OneMinuteDataMatrix(start:end,time)
7. CurrentBarDate=OHLCMatrix(date)
8. CurrentBarTime=OHLCMatrix(time)
9. CurrentBarClosePrice=OHLCMatrix(close)

Module:Strategy(PositionVector,CurrentBarDate,CurrentBarTime,CurrentBarClosePrice,CurrentMarketPosition,DbHandle,DbCursor)

Purpose: Write Signals into Signal Table

1. If PositionVector(CurrentTimeIndex-1)==0 and
PositionVector(CurrentTimeIndex)==-1 and CurrentMarketPosition==0
 - 1.1.Tradetype=1
 - 1.2.MarketEnterPrice=CurrentBarClose
 - 1.3.CurrentMarketPosition=-1
 - 1.4.Insert into SignalTable
(CurrentBarDate,CurrentBarTime,CurrentBarClose,'SELL',Qty,'Enter_Short1')
2. If PositionVector(CurrentTimeIndex-1)==0 and
PositionVector(CurrentTimeIndex)==1 and CurrentMarketPosition==0
 - 2.1.Tradetype=1
 - 2.2.MarketEnterPrice=CurrentBarClose
 - 2.3.CurrentMarketPosition=1
 - 2.4.Insert into SignalTable
(CurrentBarDate,CurrentBarTime,CurrentBarClose,'BUY',Qty,'Enter_Long1')
3. If PositionVector(CurrentTimeIndex-1)==1 and
PositionVector(CurrentTimeIndex)==-1 and CurrentMarketPosition==1 and
TradeType==1
 - 3.1.CurrentMarketPosition=0
 - 3.2.Insert into SignalTable
(CurrentBarDate,CurrentBarTime,CurrentBarClose,'SELL',Qty,'Long_Exit1')

4. If PositionVector(CurrentTimeIndex-1)==1 and
PositionVector(CurrentTimeIndex)==-1 and CurrentMarketPosition==1 and
TradeType==2
 - 4.1.CurrentMarketPosition=0
 - 4.2.Insert into SignalTable
(CurrentBarDate,CurrentBarTime,CurrentBarClose,'SELL',Qty,'Long_Exit2')
5. If PositionVector(CurrentTimeIndex-1)==1 and
PositionVector(CurrentTimeIndex)==-1 and CurrentMarketPosition==0
 - 5.1.Tradetype=2
 - 5.2.MarketEnterPrice=CurrentBarClose
 - 5.3.CurrentMarketPosition=-1
 - 5.4.Insert into SignalTable
(CurrentBarDate,CurrentBarTime,CurrentBarClose,'SELL',Qty,'Enter_Short2')
6. If PositionVector(CurrentTimeIndex-1)==-1 and
PositionVector(CurrentTimeIndex)==1 and CurrentMarketPosition==-1 and
TradeType==1
 - 6.1.CurrentMarketPosition=0
 - 6.2.Insert into SignalTable
(CurrentBarDate,CurrentBarTime,CurrentBarClose,'Buy',Qty,'Short_Exit1')
7. If PositionVector(CurrentTimeIndex-1)==-1 and
PositionVector(CurrentTimeIndex)==1 and CurrentMarketPosition==-1 and
TradeType==2
 - 7.1.CurrentMarketPosition=0
 - 7.2.Insert into SignalTable
(CurrentBarDate,CurrentBarTime,CurrentBarClose,'Buy',Qty,'Short_Exit2')
8. If PositionVector(CurrentTimeIndex-1)==-1 and
PositionVector(CurrentTimeIndex)==1 and CurrentMarketPosition==0
 - 8.1.Tradetype=2
 - 8.2.MarketEnterPrice=CurrentBarClose
 - 8.3.CurrentMarketPosition=-1
 - 8.4.Insert into SignalTable
(CurrentBarDate,CurrentBarTime,CurrentBarClose,'Buy',Qty,'Enter_Long2')

9. If $\text{PositionVector}(\text{CurrentTimeIndex}-1) == -1$ and
 $\text{PositionVector}(\text{CurrentTimeIndex}) == 0$ and $\text{CurrentMarketPosition} == -1$ and
 $\text{TradeType} == 1$
 - 9.1. $\text{CurrentMarketPosition} = 0$
 - 9.2. Insert into SignalTable
 ($\text{CurrentBarDate}, \text{CurrentBarTime}, \text{CurrentBarClose}, \text{'Buy'}, \text{Qty}, \text{'Short_Exit3}$)
10. If $\text{PositionVector}(\text{CurrentTimeIndex}-1) == -1$ and
 $\text{PositionVector}(\text{CurrentTimeIndex}) == 0$ and $\text{CurrentMarketPosition} == -1$ and
 $\text{TradeType} == 2$
 - 10.1. $\text{CurrentMarketPosition} = 0$
 - 10.2. Insert into SignalTable
 ($\text{CurrentBarDate}, \text{CurrentBarTime}, \text{CurrentBarClose}, \text{'Buy'}, \text{Qty}, \text{'Short_Exit4}$)
11. If $\text{PositionVector}(\text{CurrentTimeIndex}-1) == 1$ and
 $\text{PositionVector}(\text{CurrentTimeIndex}) == 0$ and $\text{CurrentMarketPosition} == 1$ and
 $\text{TradeType} == 1$
 - 11.1. $\text{CurrentMarketPosition} = 0$
 - 11.2. Insert into SignalTable
 ($\text{CurrentBarDate}, \text{CurrentBarTime}, \text{CurrentBarClose}, \text{'Sell'}, \text{Qty}, \text{'Long_Exit3}$)
12. If $\text{PositionVector}(\text{CurrentTimeIndex}-1) == 1$ and
 $\text{PositionVector}(\text{CurrentTimeIndex}) == 0$ and $\text{CurrentMarketPosition} == 1$ and
 $\text{TradeType} == 2$
 - 12.1. $\text{CurrentMarketPosition} = 0$
 - 12.2. Insert into SignalTable
 ($\text{CurrentBarDate}, \text{CurrentBarTime}, \text{CurrentBarClose}, \text{'Sell'}, \text{Qty}, \text{'Long_Exit4}$)