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. Initialise Resultstable='ResultsTableName'
7. Initialize RinaFileName

Member Function:Login(UserName,Password,DbName)

Purpose: Login into database

1. Login into database DbName using Username and Password

Member Function: CreateDbTable

Purpose: Create input and output tables.

1. If TrainingDataTable doesn't exist, create table TrainingDateTable.
2. Else delete data from TrainingDataTable.
3. If SignalTable doesn't exist, create table SignalTable.
4. Else delete data from SignalTable.
5. If ResultTable doesn't exist, create table ResultTable.
6. Else delete data from ResultTable.
7. Load data fromUSD1min.csv to TrainingDateTable.

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. CurentBarClosePrice=OHLCMatrix(close)

Module:Strategy(PositionVector,CurrentBarDate,CurrenBarTime,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 PositionVector(CurrentTimeIndex-1)==-1 and PositionVector(CurrentTimeIndex)==0 and CurrentMarketPosition==-1 and TradeType==1
   9.1. CurrentMarketPosition=0
   9.2. Insert into SignalTable (CurrentBarDate,CurrentBarTime,CurrentBarClose,’Buy’,Qty,’Short_Exit3)
10. If PositionVector(CurrentTimeIndex-1)==-1 and PositionVector(CurrentTimeIndex)==0 and CurrentMarketPosition==-1 and TradeType==2
    10.1. CurrentMarketPosition=0
    10.2. Insert into SignalTable (CurrentBarDate,CurrentBarTime,CurrentBarClose,’Buy’,Qty,’Short_Exit4)
11. If PositionVector(CurrentTimeIndex-1)==1 and PositionVector(CurrentTimeIndex)==0 and CurrentMarketPosition==1 and TradeType==1
    11.1. CurrentMarketPosition=0
    11.2. Insert into SignalTable (CurrentBarDate,CurrentBarTime,CurrentBarClose,’Sell’,Qty,’Long_Exit3)
12. If PositionVector(CurrentTimeIndex-1)==1 and PositionVector(CurrentTimeIndex)==0 and CurrentMarketPosition==1 and TradeType==2
    12.1. CurrentMarketPosition=0
    12.2. Insert into SignalTable (CurrentBarDate,CurrentBarTime,CurrentBarClose,’Sell’,Qty,’Long_Exit4)