



Algorithmic Market Making

This section is not required to complete the trading algorithm, but some students will find it very useful when further developing the algorithm logic to be more 'intelligent'. Using the RTD link =RTD("rit2.rtd","ALGO","OPENORDERS"), one can get a comma and semi-colon delimited listing of all live limit orders that a user has submitted. We can then use a VBA script to parse this data into a tabular format. After you have the code in VBA, you will need to highlight an empty area that is 8 columns and 8 rows, type =PARSERTD(B12) and hit CTRL-SHIFT-ENTER. This will setup the data array.

The parsing code is as follows:

```
Function PARSERTD(str As String) As Variant
' This function is used to parse the Open Order output into a table
Dim Rows() As String
Dim Cols() As String
Dim NoR As Integer
Dim NoC As Integer
If Len(Trim(str)) = 0 Then
    ReDim Res(0, 0) As String
    PARSERTD = Res
Else
    Rows = Split(str, ";")
    Cols = Split(Rows(0), ",")  

    NoR = UBound(Rows)
    NoC = UBound(Cols)
    ReDim Res(NoR + 1, NoC) As String
    For I = 0 To NoR
        Cols = Split(Rows(I), ",")  

        For j = 0 To NoC
            Res(I, j) = Cols(j)
        Next j
    Next I
    PARSERTD = Res
End If
End Function
```

9	Start Time	295						
10	Stop Time	10					0 <--=marketmake(F2,B12,B13)	
11								
12	Open Orders:	274,20.08,-250000,228900,20.08,1,71,9/17/2012 10:19:09 AM;272,20.04,250000,250000,0,1,71,9/17/2012 10:19:09 AM						
13								
14	Trade ID	Price	Total Qty	Remaining Qty	VWAP	Period	Tick	Timestamp
15	274	20.08	-250000	228900	20.08	1	71	9/17/2012 10:19:09 AM
16	272	20.04	250000	250000	0	1	71	9/17/2012 10:19:09 AM
17								
18	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
19	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
20	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
21	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
22	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
23								