John M Warlop Visual Basic Screen Shots Due 3/5/18

<u>2014</u>

<u>2015</u>

<u>2016</u>

Source Code

2014

N2	21 🛕	× v	f_{x}									
	Α	В	С	D	E	F	G	Н	1	J	K	L
1	<ticker></ticker>	<date></date>	<open></open>	<high></high>	<low></low>	<close></close>	<vol></vol>				10	
2	Α	20140101	57.19	57.19	57.19	57.19	0		Α	-16.25	-0.2841406	572978100
3	Α	20140102	57.1	57.1	56.15	56.21	1916100		AA	15.48	0.48541863	5161412000
4	Α	20140103	56.39	57.35	56.26	56.92	1866600		AA-B	1.34	0.02728569	21618200
5	Α	20140106	57.4	57.7	56.56	56.64	1777400		AAC	10.92	0.546	9789700
6	Α	20140107	56.95	57.63	56.93	57.45	1463200		AAN	1.17	0.03979592	237929300
7	Α	20140108	57.33	58.54	57.17	58.39	2659400		AAP	48.6	0.43910372	200376400
8	Α	20140109	58.4	58.68	57.87	58.41	1757600		AAT	8.38	0.26662424	40207800
9	Α	20140110	58.51	59.01	58.14	58.93	1623300		AAV	0.45	0.10368664	86658700
10	Α	20140113	58.77	59.1	58.6	58.93	2946700		AB	4.49	0.210403	83051600
11	Α	20140114	59.16	59.95	59.02	59.88	2562200		ABB	-5.41	-0.2036898	466820000
12	Α	20140115	59.82	60.37	59.59	60.34	2335100		ABBV	12.63	0.23915925	2303237600
13	Α	20140116	60.24	60.5	60.04	60.5	1835900		ABC	19.85	0.28232115	428969000
14	Α	20140117	60.83	60.83	60.33	60.71	1699500		ABEV	-1.13	-0.1537415	3208014300
15	Α	20140120	60.71	60.71	60.71	60.71	0		ABG	22.18	0.41272795	81065600
16	Α	20140121	60.69	60.88	59.86	60.85	3008400		ABM	0.06	0.00209864	52403000
17	Α	20140122	60.82	61.22	60.71	60.93	2769300		ABR	0.11	0.01651652	28348400
18	Α	20140123	60.48	60.51	59.4	59.47	3063500		ABR-A	0.77	0.03179191	1798500
19	Α	20140124	59.46	59.46	57.71	57.87	2656300		ABR-B	2.09	0.09243697	1722000
20	Α	20140127	57.9	58.37	56.98	58.3	4669000		ABR-C	0.94	0.0386037	1758200
21	Α	20140128	58.5	58.88	57.91	58.1	2536200		ABRN	0.49	0.02040816	3451100
22	Α	20140129	57.67	58.22	57.41	57.65	2163000		ABT	6.69	0.17453692	1516024700
23	Α	20140130	58.42	60.11	58.42	59.51	3743100		ABX	-6.88	-0.3902439	3085372400
24	Α	20140131	58.61	59.15	58.05	58.15	3529000		ACC	9.15	0.28407327	180543400
25	Α	20140203	58.15	58.48	56.08	56.15	2929200		ACCO	2.29	0.34077381	223248000
26	Α	20140204	56.32	57.88	56.09	57.81	2911800		ACH	2.82	0.32413793	34117500
27	Α	20140205	57.58	57.7	56.96	57.43	2283800		ACM	0.94	0.0319402	303393900
28	Α	20140206	57.51	58.35	57.46	58.29	1609400		ACN	7.09	0.08623206	705479100
29	А	20140207	58.46	59.47	58.13	59.42	1975200		ACP	-2.47	-0.1405006	14206700
30	Α	20140210	59.27	59.44	58.29	59.01	1760400		ACRE	-1.62	-0.1236641	44197000
31	Α	20140211	59	60	58.88	59.73	2148200		ACW	0.61	0.16353887	60360500
32	Α	20140212	60	60.46	59.67	59.89	2347200		ADC.	2.07	0.07133012	16456400
4	•	2016	2015	2014	+							

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2	Α	20150101	40.94	40.94	40.94	40.94	0		Α	0.87	0.02125061	645319200
3	Α	20150102	41.18	41.31	40.37	40.56	1530700		AA	-17.76	-0.3749208	6449104200
4	Α	20150105	40.32	40.46	39.7	39.8	2042200		AA-B	-17.14	-0.3397423	40441700
5	Α	20150106	39.81	40.02	39.02	39.18	2084500		AAC	-11.86	-0.3835705	78122300
6	Α	20150107	39.52	39.81	39.29	39.7	3359600		AAN	-8.18	-0.2675826	179606700
7	Α	20150108	40.24	40.98	40.18	40.89	2116300		AAP	-8.77	-0.0550603	266930500
8	Α	20150109	41	41	40.29	40.59	1644900		AAT	-1.46	-0.0366742	48158100
9	Α	20150112	40.61	40.72	39.95	40.11	2771100		AAV	0.29	0.0605428	30229400
10	Α	20150113	40.47	40.7	39.33	39.55	2013400		AB	-1.98	-0.0766551	71403800
11	Α	20150114	39.03	39.1	38.21	39.06	5134000		ABB	-3.42	-0.1617021	532805500
12	Α	20150115	39.33	39.41	37.99	38.01	2630200		ABBV	-6.2	-0.0947433	2643021600
13	Α	20150116	37.86	38.46	37.76	38.25	3003900		ABC	13.55	0.15028838	516218400
14	Α	20150119	38.25	38.25	38.25	38.25	0		ABEV	-1.76	-0.2829582	3915345800
15	Α	20150120	38.43	38.66	37.76	37.93	5033600		ABG	-8.48	-0.1116965	82930400
16	Α	20150121	37.75	38.41	37.68	38.16	2721600		ABM	-0.18	-0.0062827	72539400
17	Α	20150122	38.51	39.86	38.12	39.65	4856500		ABR	0.38	0.05612999	37916900
18	Α	20150123	39.6	39.6	38.76	38.81	1519200		ABR-A	-0.49	-0.0196078	1243100
19	Α	20150126	38.79	39.17	38.47	39.15	1511200		ABR-B	-2.14	-0.0866397	1022000
20	Α	20150127	38.7	39.25	38.58	38.75	1703500		ABR-C	-0.12	-0.004745	634000
21	Α	20150128	39.01	39.05	37.96	38	2033500		ABRN	0.1	0.00408163	2109900
22	Α	20150129	38	38.47	37.69	38.46	2329900		ABT	-0.11	-0.0024434	1469310700
23	Α	20150130	38.01	38.32	37.71	37.77	3054300		ABX	-3.37	-0.3134884	4289215100
24	Α	20150202	37.9	38.76	37.71	38.69	2508400		AC	1	0.03389831	437700
25	Α	20150203	39.04	39.63	38.92	39.62	2950300		ACC	-0.02	-0.0004836	228980000
26	Α	20150204	39.33	39.46	38.82	39.11	2567400		ACCO	-1.88	-0.208657	167330800
27	Α	20150205	39.22	39.82	39.22	39.53	1826300		ACH	-3.28	-0.2847222	35801000
28	Α	20150206	39.54	39.81	39.23	39.34	2697200		ACM	-0.34	-0.0111953	362299600
29	A	20150209	39.23	39.43	38.95	39.04	3586100		ACN	15.19	0.17008174	625655000
30	A	20150210	39.31	39.76	38.78	39.67	1408700		ACP	-3.76	-0.2488418	14348400
31	A	20150211	39.64	39.81	39.23	39.33	3337000		ACRE	-0.04	-0.0034843	39118800
32	A	20150212	39.58	40.06	39.53	40.02	1317700		ACV	-6.79	-0.2721443	11539300
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A	Α	В	С	D	Е	F	G	Н	1	J	K	L
1	<ticker></ticker>	<date></date>	<open></open>	<high></high>	<low></low>	<close></close>	<vol></vol>		Ticker	Yearly Change	Percent Change	Total Stock Volume
2	Α	20160101	41.81	41.81	41.81	41.81	0		Α	3.75	0.089691461	528576200
3	Α	20160104	41.06	41.19	40.34	40.69	3287300		AA	-1.53	-0.051671733	5208239000
4	Α	20160105	40.73	40.95	40.34	40.55	2587200		AAC	-11.82	-0.620146905	57179800
5	Α	20160106	40.24	40.99	40.05	40.73	2103600		AAN	9.6	0.428762841	184809000
6	Α	20160107	40.14	40.15	38.81	39	3504300		AAP	18.61	0.123646269	262665300
7	Α	20160108	39.22	39.71	38.47	38.59	3736700		AAT	4.73	0.123337679	49026400
8	Α	20160111	38.71	38.9	37.41	37.94	2818600		AAV	1.67	0.328740157	27358200
9	Α	20160112	38.43	38.58	37.65	38.19	1989300		AB	-0.4	-0.016771488	64736300
10	Α	20160113	38.35	38.47	36.72	36.86	4206600		ABB	3.34	0.188381275	503779400
11	Α	20160114	36.94	37.88	36.55	37.61	2893300		ABBV	3.38	0.057056043	2034231800
12	Α	20160115	36.67	37.56	36.55	37.11	2994300		ABC	-25.52	-0.246070774	647239900
13	Α	20160118	37.11	37.11	37.11	37.11	0		ABEV	0.45	0.100896861	4199335100
14	Α	20160119	37.64	37.92	36.79	37.2	2506500		ABG	-5.74	-0.085112693	89828200
15	Α	20160120	36.68	37.61	36.13	37.26	2469000		ABM	12.37	0.434492448	79787400
16	Α	20160121	37.35	37.83	36.81	37.23	2298300		ABR	0.31	0.043356643	27556100
17	Α	20160122	37.91	38.18	37.58	37.98	1834400		ABR-A	0.57	0.023265306	792500
18	Α	20160125	37.4	38.03	37.4	37.61	1831200		ABR-B	2.02	0.089539007	795300
19	Α	20160126	37.89	37.96	37.36	37.51	1755000		ABR-C	0.18	0.007151371	521300
20	Α	20160127	37.39	37.92	36.81	37.05	1479400		ABRN	0.7	0.028455285	1759800
21	Α	20160128	37.27	37.27	36.01	36.11	3479400		ABT	-6.5	-0.144733912	2298099600
22	Α	20160129	36.44	37.69	36.31	37.65	2959800		ABX	8.6	1.165311653	4996990800
23	Α	20160201	37.37	37.95	37	37.69	2666500		AC	2.35	0.07704918	6530000
24	Α	20160202	37.18	37.55	36.95	37.07	1742300		ACC	8.43	0.203918723	258457600
25	Α	20160203	37.27	37.36	36.29	37.19	2128400		ACCO	5.92	0.83029453	163653100
26	Α	20160204	37.15	37.79	36.97	37.42	2833400		ACH	1.97	0.23907767	11563400
27	Α	20160205	37.26	37.31	35.83	36.04	4424600		ACM	6.33	0.210789211	296759000
28	Α	20160208	35.61	35.78	34.39	34.8	3888600		ACN	12.63	0.120861244	650155300
29	Α	20160209	34.21	35.77	34.15	35.37	3464400		ACP	2.08	0.183259912	21179200
30	Α	20160210	35.63	36.73	35.53	35.85	3169900		ACRE	2.29		35062000
31	A	20160211	35.12	35.61	34.94	35.33	3224000		ACV	0.62	0.034140969	12734300
32	Α	20160212	35.84	36.23	35.52	36.22	3923600		ADC	12.06		51966400
4		2016	2015	2014	+							

Source Code

```
' Given starting row, col return array of ranges for column
     ' Used to find column range for a column that has same content
     Function getColRanges(Row As Long, Col As Long, size As Long) As Long()
         Dim rArray() As Long
         Dim I As Long
         Dim j As Long
         Dim k As Long
         Dim r1 As Long
         Dim r2 As Long
         ReDim rArray(1 To size)
         j = Row
         I = j
         k = 1
         Do
             c = Cells(j, Col).Value 'starting value
             Do 'Loop until c changes
                 j = j + 1
             Loop Until c <> Cells(j, Col).Value
             r1 = I
             r2 = j - 1
21
             I = r2 + 1
             j = I
             rArray(k) = r1
             rArray(k + 1) = r2
             k = k + 2
         Loop Until IsEmpty(Cells(I, Col).Value) = True
         getColRanges = rArray()
     End Function
```

```
31
     Function Calculate() As Boolean
32
          Dim I As Long
33
          Dim j As Long
          Dim k As Long
34
35
          Dim l As Integer
36
          Dim r As Integer
37
          Dim start As Long
38
          Dim cStock As String
39
          Dim rStr As String
          Dim xs As String
41
          Dim r1 As Long
42
          Dim r2 As Long
43
          Dim x As Variant
44
          Dim volCol As Variant 'Column for Volume
45
          Dim openVal As Double
          Dim closeVal As Double
46
47
          Dim pDelta As Double
48
          Dim rArray() As Long
49
          volCol = 12
50
          openCol = 3
51
          closeCol = 6
52
53
          Dim WS_Count As Integer
54
          Dim M As Integer
55
```

```
' Get the ranges
    rArray = getColRanges(2, 1, 128000)
    l = 1 'First index into array
    r = 2 'Set to starting row first
    For Each Element In rArray
        If rArray(l) = 0 Then
            Exit For
        End If
        If 1 Mod 2 <> 0 Then
            'Get ticker symbol
            Cells(r \setminus 2 + 1, 9). Value = Cells(rArray(l), 1). Value
        Else 'stuff that takes full range odd and even index
            'Find volume total
            rStr = "G" & CStr(rArray(l - 1)) & ":G" & CStr(rArray(l))
            x = Application.WorksheetFunction.Sum(Range(rStr))
            Cells(r \ 2 + 1, volCol). Value = x
            'Calculate yearly price change
            pDelta = Cells(rArray(l), 6).Value - Cells(rArray(l - 1), 3).Value
            Cells(r \setminus 2 + 1, 10).Value = pDelta
            'Calculate yearly percent increase/decrease
            If Cells(rArray(l - 1), 3) \Leftrightarrow 0 Then
                pChg = pDelta / (Cells(rArray(l - 1), 3))
            Else
                pChg = 0
            End If
            Cells(r \setminus 2 + 1, 11).Value = pChg
        End If
        l = l + 1
        r = r + 1
    Next Element
End Function
```

```
Function FillCells2Colors(Row As Integer, Col As Integer) As Boolean
          r = Row
          c = Col
          Do
              If Cells(r, c). Value < 0 Then
                   Cells(r, c).Interior.ColorIndex = 3
               End If
              If Cells(r, c). Value > 0 Then
96
                   Cells(r, c).Interior.ColorIndex = 4
               End If
               r = r + 1
          Loop Until IsEmpty(Cells(r, c).Value) = True
100
      End Function
      Sub Stocks()
102
103
          Dim x As Boolean
          Dim WS_Count As Integer
104
          Dim M As Integer
          WS_Count = ActiveWorkbook.Worksheets.Count
106
          For M = 1 To WS_Count
                  Worksheets(M).Activate
                  x = Calculate()
                  x = FillCells2Colors(2, 10)
110
111
               Next M
112
      End Sub
```