Alex Arnold SMU Data Science Bootcamp October 11, 2020

VBA Homework: The VBA of Wall Street

Purpose:

The purpose of this assignment was to use VBA scripting to analyze real stock market data.

Screenshots:

<ticker></ticker>	<date></date>	<open></open>	<high></high>	<low></low>	<close></close>	<vol></vol>	Ticker	Yearly Change	Percent Change	Total Stock Volume		Ticker	Value
A	20160101	41.81	41.81	41.81	41.81	0	A	3.75	8.969146137	528576200	Greatest % Increase	SD	11675
4	20160104	41.06	41.19	40.34	40.69	3287300	AA	-1.53	-5.167173252	5208239000	Greatest % Decrease	DYN.W	-91.489362
Α	20160105	40.73	40.95	40.34	40.55	2587200	AAC	-11.82	-62.01469045	57179800	Greatest Total Volume	BAC	2.7429E+10
A	20160106	40.24	40.99	40.05	40.73	2103600	AAN	9.6	42.87628406	184809000			
Α	20160107	40.14	40.15	38.81	39	3504300	AAP	18.61	12.36462694	262665300			
A	20160108	39.22	39.71	38.47	38.59	3736700	AAT	4.73	12.33376793	49026400			
4	20160111	38.71	38.9	37.41	37.94	2818600	AAV	1.67	32.87401575	27358200			
A	20160112	38.43	38.58	37.65	38.19	1989300	AB	-0.4	-1.677148847	64736300			
Α	20160113	38.35	38.47	36.72	36.86	4206600	ABB	3.34	18.83812747	503779400		1	
Α	20160114	36.94	37.88	36.55	37.61	2893300	ABBV	3.38	5.705604321	2034231800			
A	20160115	36.67	37.56	36.55	37.11	2994300	ABC	-25.52	-24.60707743	647239900			
A	20160118	37.11	37.11	37.11	37.11	0	ABEV	0.45	10.0896861	4199335100			
A	20160119	37.64	37.92	36.79	37.2	2506500	ABG	-5.74	-8.511269276	89828200			
Α	20160120	36.68	37.61	36.13	37.26	2469000	ABM	12.37	43.44924482	79787400			
A	20160121	37.35	37.83	36.81	37.23	2298300	ABR	0.31	4.335664336	27556100			
A	20160122	37.91	38.18	37.58	37.98	1834400	ABR-A	0.57	2.326530612	792500			
A	20160125	37.4	38.03	37.4	37.61	1831200	ABR-B	2.02	8.953900709	795300			
A	20160126	37.89	37.96	37.36	37.51	1755000	ABR-C	0.18	0.715137068	521300			
Α	20160127	37.39	37.92	36.81	37.05	1479400	ABRN	0.7	2.845528455	1759800			
A	20160128	37.27	37.27	36.01	36.11	3479400	ABT	-6.5	-14.47339123	2298099600			
A	20160129	36.44	37.69	36.31	37.65	2959800	ABX	8.6	116.5311653	4996990800			
A	20160201	37.37	37.95	37	37.69	2666500	AC	2.35	7.704918033	6530000			
A	20160202	37.18	37.55	36.95	37.07	1742300	ACC	8.43	20.39187228	258457600			
A	20160203	37.27	37.36	36.29	37.19	2128400	ACCO	5.92	83.02945302	163653100			
A	20160204	37.15	37.79	36.97	37.42	2833400	ACH	1.97	23.90776699	11563400			
A	20160205	37.26	37.31	35.83	36.04	4424600	ACM	6.33	21.07892108	296759000			
A	20160208	35.61	35.78	34.39	34.8	3888600	ACN	12.63	12.0861244	650155300			
A	20160209	34.21	35.77	34.15	35.37	3464400	ACP	2.08	18.32599119	21179200			
A	20160210	35.63	36.73	35.53	35.85	3169900	ACRE	2.29	20.01748252	35062000			
Α	20160211	35.12	35.61	34.94	35.33	3224000	ACV	0.62	3.414096916	12734300			
	2016	2015		+									

Figure 1 Stock Data for 2016

<ticker></ticker>	<date></date>	<open></open>	<high></high>	<low></low>	<close></close>	<vol></vol>	Ticker	Yearly Change	Percent Change	Total Stock Volume		Ticker	Value
4	20150101	40.94	40.94	40.94	40.94	0	Α	0.87	2.125061065	645319200	Greatest % Increase	PLNT	1.563E+10
	20150102	41.18	41.31	40.37	40.56	1530700	AA	-17.76	-37.4920836	6449104200	Greatest % Decrease	KMI.W	-98.591549
Α	20150105	40.32	40.46	39.7	39.8	2042200	AA-B	-17.14	-33.97423191	40441700	Greatest Total Volume	BAC	2.1278E+10
Ą	20150106	39.81	40.02	39.02	39.18	2084500	AAC	-11.86	-38.35705045	78122300			
Ą	20150107	39.52	39.81	39.29	39.7	3359600	AAN	-8.18	-26.75825973	179606700			
١	20150108	40.24	40.98	40.18	40.89	2116300	AAP	-8.77	-5.506027122	266930500			
A	20150109	41	41	40.29	40.59	1644900	AAT	-1.46	-3.667420246	48158100			
A	20150112	40.61	40.72	39.95	40.11	2771100	AAV	0.29	6.054279749	30229400			
A	20150113	40.47	40.7	39.33	39.55	2013400	AB	-1.98	-7.665505226	71403800			
4	20150114	39.03	39.1	38.21	39.06	5134000	ABB	-3.42	-16.17021277	532805500			
4	20150115	39.33	39.41	37.99	38.01	2630200	ABBV	-6.2	-9.474327628	2643021600			
A	20150116	37.86	38.46	37.76	38.25	3003900	ABC	13.55	15.02883762	516218400			
4	20150119	38.25	38.25	38.25	38.25	0	ABEV	-1.76	-28.29581994	3915345800			
4	20150120	38.43	38.66	37.76	37.93	5033600	ABG	-8.48	-11.16965227	82930400			
4	20150121	37.75	38.41	37.68	38.16	2721600	ABM	-0.18	-0.628272251	72539400			
Ą	20150122	38.51	39.86	38.12	39.65	4856500	ABR	0.38	5.612998523	37916900			
4	20150123	39.6	39.6	38.76	38.81	1519200	ABR-A	-0.49	-1.960784314	1243100			
4	20150126	38.79	39.17	38.47	39.15	1511200	ABR-B	-2.14	-8.663967611	1022000			
4	20150127	38.7	39.25	38.58	38.75	1703500	ABR-C	-0.12	-0.474495848	634000			
4	20150128	39.01	39.05	37.96	38	2033500	ABRN	0.1	0.408163265	2109900			
Ą	20150129	38	38.47	37.69	38.46	2329900	ABT	-0.11	-0.244335851	1469310700			
A	20150130	38.01	38.32	37.71	37.77	3054300	ABX	-3.37	-31.34883721	4289215100			
4	20150202	37.9	38.76	37.71	38.69	2508400	AC	1	3.389830508	437700			
Ą	20150203	39.04	39.63	38.92	39.62	2950300	ACC	-0.02	-0.048355899	228980000			
4	20150204	39.33	39.46	38.82	39.11	2567400	ACCO	-1.88	-20.86570477	167330800			
4	20150205	39.22	39.82	39.22	39.53	1826300	ACH	-3.28	-28.47222222	35801000			
4	20150206	39.54	39.81	39.23	39.34	2697200	ACM	-0.34	-1.119525848	362299600			
A	20150209	39.23	39.43	38.95	39.04	3586100	ACN	15.19	17.00817378	625655000			
Ą	20150210	39.31	39.76	38.78	39.67	1408700	ACP	-3.76	-24.88418266	14348400			
A	20150211	39.64	39.81	39.23	39.33	3337000	ACRE	-0.04	-0.348432056	39118800			
	2016	2015	2014	+									

Figure 2 Stock Data for 2015

<pre><ticker></ticker></pre>	<date></date>	<open></open>	<high></high>	<low></low>	<close></close>	<vol></vol>	Ticker	Yearly Change	Percent Change	Total Stock Volume		Ticker	Value	
4	20140101	57.19	57.19	57.19	57.19	0	A	-16.25	-28.4140584	572978100	Greatest % Increase	DM	5581.15942	
١	20140102	57.1	57.1	56.15	56.21	1916100	AA	15.48	48.54186265	5161412000	Greatest % Decrease	СВО	-95.726496	
A	20140103	56.39	57.35	56.26	56.92	1866600	AA-B	1.34	2.72856852	21618200	Greatest Total Volume	BAC	2.1595E+10	
4	20140106	57.4	57.7	56.56	56.64	1777400	AAC	10.92	54.6	9789700				
4	20140107	56.95	57.63	56.93	57.45	1463200	AAN	1.17	3.979591837	237929300				
4	20140108	57.33	58.54	57.17	58.39	2659400	AAP	48.6	43.91037224	200376400				
4	20140109	58.4	58.68	57.87	58.41	1757600	AAT	8.38	26.66242444	40207800				
4	20140110	58.51	59.01	58.14	58.93	1623300	AAV	0.45	10.36866359	86658700				
A	20140113	58.77	59.1	58.6	58.93	2946700	AB	4.49	21.04029991	83051600				
4	20140114	59.16	59.95	59.02	59.88	2562200	ABB	-5.41	-20.3689759	466820000				
4	20140115	59.82	60.37	59.59	60.34	2335100	ABBV	12.63	23.91592501	2303237600				
Ą	20140116	60.24	60.5	60.04	60.5	1835900	ABC	19.85	28.23211492	428969000				
4	20140117	60.83	60.83	60.33	60.71	1699500	ABEV	-1.13	-15.37414966	3208014300				
4	20140120	60.71	60.71	60.71	60.71	0	ABG	22.18	41.27279494	81065600				
١.	20140121	60.69	60.88	59.86	60.85	3008400	ABM	0.06	0.209863589	52403000				
4	20140122	60.82	61.22	60.71	60.93	2769300	ABR	0.11	1.651651652	28348400				
A	20140123	60.48	60.51	59.4	59.47	3063500	ABR-A	0.77	3.179190751	1798500				
A	20140124	59.46	59.46	57.71	57.87	2656300	ABR-B	2.09	9.243697479	1722000				
4	20140127	57.9	58.37	56.98	58.3	4669000	ABR-C	0.94	3.86036961	1758200				
4	20140128	58.5	58.88	57.91	58.1	2536200	ABRN	0.49	2.040816327	3451100				
A	20140129	57.67	58.22	57.41	57.65	2163000	ABT	6.69	17.45369163	1516024700				
4	20140130	58.42	60.11	58.42	59.51	3743100	ABX	-6.88	-39.02439024	3085372400				
4	20140131	58.61	59.15	58.05	58.15	3529000	ACC	9.15	28.40732692	180543400				
4	20140203	58.15	58.48	56.08	56.15	2929200	ACCO	2.29	34.07738095	223248000				
4	20140204	56.32	57.88	56.09	57.81	2911800	ACH	2.82	32.4137931	34117500				
4	20140205	57.58	57.7	56.96	57.43	2283800	ACM	0.94	3.194019708	303393900				
4	20140206	57.51	58.35	57.46	58.29	1609400	ACN	7.09	8.623206033	705479100				
4	20140207	58.46	59.47	58.13	59.42	1975200	ACP	-2.47	-14.05005688	14206700				
4	20140210	59.27	59.44	58.29	59.01	1760400	ACRE	-1.62	-12.36641221	44197000				
Α	20140211	59	60	58.88	59.73	2148200	ACW	0.61	16.3538874	60360500				
	2016	2015	2014	+										

Figure 3 Stock Data for 2014