

Ngan Tran

October 11, 2020

VBA Challenge

Screenshots:

Test data:

A:

B:

20201011 NT_alphaalphabetic_testing																		
Home		Insert		Draw		Page Layout		Formulas		Data		Review		View		Developer		Tell me
P1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	stockerID	<date>	<open>	<high>	<low>	<close>	<vol>	stockName	yearlyChange	percentChange	stockTotal	Conditional	Format	Cell	Insert	Delete	Format	S
2	B	20160101	35.39	35.39	35.39	35.39	0	BA	12.0%	33.99265329	56633600	Formatting	As Table	Styles			T	
3	B	20160104	34.67	35.12	34.06	34.31	277300	BA	11.0%	7.66963345	111660700	Format	Table	Cell Styles				
4	B	20160105	34.33	34.39	33.87	34.12	204300	BABA	6.5%	8.047249908	3742094000	Cell	Sort & Filter	Find & Select				
5	B	20160106	33.59	33.92	33.55	33.86	229000	BAC	5.3%	31.31313131	27428529600	Insert						
6	B	20160107	33.16	33.34	32.57	32.64	234400	BAC-A	-0.2%	-0.015240748	43727700							
7	B	20160108	32.85	32.85	32.19	32.26	229400	BAC-C	-0.0%	-0.23715415	43552600							
8	B	20160111	32.48	32.65	31.71	32.56	152900	BAC-D	-0.7%	-2.864885792	12479800							
9	B	20160112	33.53	33.93	32.34	32.98	302000	BAC-E	-0.5%	-2.50111657	15098400							
10	B	20160113	33.15	33.32	31.53	31.65	228100	BAC-I	-1.4%	-5.381165919	5943700							
11	B	20160114	31.86	32.47	31.22	32.1	196400	BAC-L	7.5%	6.725694476	2481300							
12	B	20160115	31.06	31.16	30.85	31.49	312900	BAC-W	-1.0%	-3.851907255	23599700							
13	B	20160118	31.49	31.49	31.49	31.49	0	BAC-Y	-1.4%	-4.491017964	25334000							
14	B	20160119	31.87	31.87	30.84	31.27	203400	BAC-A	4.1%	70.96219931	165623300							
15	B	20160120	30.85	31.79	30.43	31.38	210200	BAC-B	0.0%	255.5555556	54083700							
16	B	20160121	31.42	31.53	30.79	30.87	222800	BAF	-0.5%	-3.51826793	6221300							
17	B	20160122	31.33	31.94	31.03	31.54	138200	BAH	-0.2%	16.92058347	263732400							
18	B	20160125	31.36	31.48	30.64	30.74	139800	BAK	7.6%	56.64697194	137314000							
19	B	20160126	30.98	31.69	30.98	31.6	199000	BAM	1.4%	4.693942277	285278900							
20	B	20160127	31.45	31.94	31.17	31.35	173200	BAN-C	-0.7%	-2.859292701	930500							
21	B	20160128	31.7	31.99	31.2	31.41	85300	BAN-D	0.5%	-2.234206471	3546200							
22	B	20160129	31.49	32.58	31.4	32.51	309200	BAN-E	0.1%	0.484848485	7550200							
23	B	20160201	32.23	32.41	31.8	32.2	153100	BANC	2.7%	18.67305062	247132700							
24	B	20160202	31.82	31.85	31.11	31.17	183900	BAP	60.5%	62.20715166	90719600							
25	B	20160203	31.52	31.52	30.65	31.22	232800	BAS	32.6%	1219.029851	601319000							
26	B	20160204	31.18	32.08	31.05	31.43	369300	BAX	6.1%	16.22542595	1488815900							
27	B	20160205	31.27	31.47	30.95	30.98	455000	BBD	3.5%	81.08108108	3423802200							
28	B	20160208	30.67	31.21	30.44	30.99	346200	BBDO	3.6%	69.54022989	931600							
29	B	20160209	30.58	31.15	30.55	30.96	267700	BBF	0.5%	-4.04105989	5674200							
30	B	20160210	31.08	31.2	30.69	30.71	325900	BBG	3.0%	77.86259542	521616400							
31	B	20160211	30.31	30.86	30.07	30.69	223800	BBK	0.8%	-5.45229441	5780600							
32	B	20160212	30.88	31.23	30.2	30.5	408800	BBL	8.8%	38.89624724	692412200							
33	B	20160215	30.5	30.5	30.5	30.5	0	BBN	0.6%	2.955195424	59273400							
34	B	20160216	30.82	31.21	30.52	31	601200	BBT	9.2%	24.35863528	1263676700							
35	B	20160217	31.2	31.29	30.82	30.82	561500	BBD-T	-1.8%	-7.15371461	9218200							
36	B	20160218	30.84	31.86	30.73	31.75	1074400	BBT-E	-2.3%	-9.038682497	20186600							
37	B	20160219	32.59	34.75	32.59	33.96	841800	BBT-F	2.3%	-9.322709163	8286500							
38	B	20160222	34.37	34.85	33.64	33.79	713200	BBT-G	2.4%	-9.702970297	8763300							
39	B	20160223	33.6	33.83	33.07	33.53	357900	BBT-H	0.7%	-3.033921316	28231300							
40	B	20160224	33.13	34.42	32.81	34.24	295600	BBU	4.1%	-14.77151966	5003300							
41	B	20160225	34.25	34.52	33.64	34.49	272100	BBVA	0.5%	-7.639836289	834339600							

C:

F:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
	<ticker>	<date>	<open>	<high>	<low>	<close>	<vol>		stockName	yealChange	percentChange				Stock	Value				
2	F	20160101	14.09	14.09	14.09	14.09	0	F	-1.96	-13.91057488	9032398200	greatInStock	FMS	401.7021277						
3	F	20160102	13.87	14	13.75	13.97	38618500	FAC	-1.34	-56.30251201	7132900	greatDeStock	FIS	-75.26191281						
4	F	20160105	13.97	14	13.51	13.72	50267500	FAF	0.73	2.033426184	191366100	greatVolStock	FCT	10511104500						
5	F	20160106	13.56	13.56	13.05	13.11	61285400	FAM	1.03	10.16781836	9892100									
6	F	20160107	12.9	13.04	12.6	12.7	57846600	FBC	3.83	16.57291216	45608200									
7	F	20160108	13.05	13.1	12.5	12.54	46199400	FBSH	-2.56	-6.375675676	378644600									
8	F	20160111	12.8	12.82	12.55	12.77	41269100	FBK	4.8	22.69503546	10334400									
9	F	20160112	13.03	13.04	12.58	12.85	50983600	FBP	3.36	103.3846154	236500500									
10	F	20160113	12.73	12.84	12.06	12.2	102174600	FBR	-1.06	-24.27107959	414224100									
11	F	20160114	12.19	12.31	11.82	12.19	62938600	FC	-3.41	20.37037037	11467300									
12	F	20160115	11.81	12	11.58	11.97	69029900	FCAU	-0.87	-34.81057898	1831803100									
13	F	20160118	11.97	11.97	11.97	11.97	0	FCB	11.91	33.2774518	59370400									
14	F	20160119	12.15	12.16	11.82	11.95	41142600	FC EA	-1.09	-4.970360237	400064100									
15	F	20160120	11.79	12.07	11.47	11.9	59879000	FC EB	9.06	23.13671696	392800									
16	F	20160121	12.01	12.28	11.86	12.01	48841700	FCF	5.11	56.33958104	71437800									
17	F	20160122	12.26	12.36	12.03	12.14	44537800	FCFS	-5.49	-10.45913507	21569900									
18	F	20160123	12.3	12.31	11.93	11.98	96738500	FOH	0.71	9.726027397	303898200									
19	F	20160126	12.14	12.29	12.04	12.26	45969700	FOH-A	-0.24	-0.054274354	4592200									
20	F	20160127	12.05	12.1	11.73	11.85	42064200	FON	10.42	30.06347374	6054500									
21	F	20160128	12.03	12.06	11.2	11.71	75699700	FOPT	-3.64	-15.06622517	151872600									
22	F	20160129	11.83	11.94	11.65	11.94	52137300	FCT	1.48	11.98380567	17457900									
23	F	20160201	11.92	12.14	11.73	12.07	37301100	FCX	6.42	94.83013294	10511104500									
24	F	20160202	11.95	12.08	11.45	11.51	56494100	FDC	-1.83	-11.42322097	1206612100									
25	F	20160203	11.67	11.68	11.02	11.46	69454500	FDEU	-1.64	-9.557109557	20368300									
26	F	20160204	11.37	11.69	11.26	11.53	40223100	FDP	21.75	55.94135802	58711300									
27	F	20160205	11.52	11.7	11.42	11.45	33322100	FDS	0.86	0.0529002891	83300100									
28	F	20160208	11.39	11.69	11.25	11.59	45274500	FDX	37.21	24.97483053	430731000									
29	F	20160209	11.47	11.61	11.22	11.35	48956700	FE	-0.76	-2.395209581	1063377800									
30	F	20160210	11.46	11.57	11.33	11.34	38160200	FEI	2.92	22.08747584	48111300									
31	F	20160211	11.17	11.43	11.1	11.17	45801300	FELP	2.94	83.28611898	45872300									
32	F	20160212	11.25	11.58	11.18	11.55	28084900	FENG	-2.88	-47.84053156	26403100									
33	F	20160215	11.55	11.55	11.55	11.55	0	FEO	0.83	6.355283308	5169500									
34	F	20160216	11.75	11.88	11.53	11.87	41072000	FET	9.54	76.565000803	264377900									
35	F	20160217	11.99	12.3	11.98	12.27	37766400	FF	0.4	2.962962963	3356300									
36	F	20160218	12.4	12.44	12.12	12.26	28784700	FFA	0.31	2.348484848	13558700									
37	F	20160219	12.19	12.22	12.01	12.1	26479300	FFC	-1.21	-0.034912718	33273000									
38	F	20160222	12.24	12.56	12.24	12.56	35549700	FFG	14.51	22.80012571	8940500									
39	F	20160223	12.53	12.65	12.42	12.42	30136700	FGB	1.49	26.75044883	10045900									
40	F	20160224	12.11	12.11	11.6	12.08	60608300	FGL	-1.67	-6.582577948	54436400									
41	F	20160225	12.11	12.4	12.05	12.39	32024800	FGP	-9.85	-59.21686747	146015800									

P:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
	<ticker>	<date>	<open>	<high>	<low>	<close>	<vol>		stockName	yealChange	percentChange				Stock	Value				
2	P	20140101	26.6	26.6	26.6	26.6	0	P	-8.77	-32.96992481	2087326500	greatInStock	PAM	113.2764921						
3	P	20140102	26.46	27.23	26.26	26.76	6227100	PAA	-0.45	-0.86922923	265764400	greatDeStock	PVTD	-75.11961722						
4	P	20140103	26.9	27.69	26.77	27.59	6102100	PAC	9.98	18.75234874	15869800	greatVolStock	PBI-B	7733747800						
5	P	20140106	29.1	32.45	29	31.49	29065000	PACD	-6.82	-15.5113438	143918500									
6	P	20140107	31.22	33.7	31.2	32.44	20493000	PAG	1.91	4.050042409	88908800									
7	P	20140108	32.66	34.46	32.6	32.7	18484900	PAGP	-3.27	-4.07122077	259521900									
8	P	20140109	32.88	33.47	31.94	32.78	10140000	PAH	8.22	54.8	173849700									
9	P	20140110	32.84	33.53	32.15	33.47	8242700	PAI	0.37	2.048558422	5172200									
10	P	20140113	33.36	34.07	32.06	32.53	9779100	PAM	4.78	91.22137405	56387900									
11	P	20140114	33.25	34.41	32.95	34.13	88404000	PANW	65.1	113.2764921	452349800									
12	P	20140115	34.39	35.48	34.34	35.05	99581000	PAR	0.7	12.8440367	5169600									
13	P	20140116	34.99	36.3	34.64	35.74	73320000	PAY	10.38	38.70246085	405653900									
14	P	20140117	35.74	36.02	34.61	35.12	6073700	PAYC	8.43	47.09427027	27249800									
15	P	20140120	35.12	35.12	35.12	35.12	0	PB	-8.03	-12.6671319	93218300									
16	P	20140121	35.67	35.99	34.54	35.01	59204000	PBA	1.18	3.34941811	57831200									
17	P	20140203	35.34	35.7	34.47	34.62	4626900	PBF	-4.82	-15.32104259	414276800									
18	P	20140213	34.72	34.87	33.57	34.64	4375000	PBXF	-6.65	-23.75	24815700									
19	P	20140214	34.58	34.58	33.37	33.55	5481100	PBH	-1.08	-3.01675977	87008100									
20	P	20140217	33.85	36.3	34.06	35.83	13650600	PBI	1.07	4.952274678	556569700									
21	P	20140218	33.55	34.05	33.33	34.74	4065700	PBI-B	2.19	8.49973436										

Real data:

2014:

Multiple_year_stock_data

The screenshot shows a Microsoft Excel spreadsheet titled "Multiple_year_stock_data". The main table has columns for date, open, high, low, close, volume, stockName, yearlyChange, percentChange, and stockTotal. The summary table at the top right shows stock values for greatIncStock, greatDecStock, KMI-A, and BABA.

	Q6	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Stock	Value	
1	<ticker>	<date>	<open>	<high>	<low>	<close>	<vol>													156300000000.00
2	A	20150101	40.94	40.94	40.94	40.94	0	A	0.87	2.125061065	645319200	greatIncStock	PLD							
3	A	20150102	41.18	41.31	40.37	40.56	1530700	AA	-17.76	-37.4920836	6449104200	greatDecStock	KMI-A							-98.59
4	A	20150105	40.32	40.46	39.7	39.8	2042200	AA-B	-17.14	-33.97423191	40441700	greatVolStock	BABA							21277761900.00
5	A	20150106	39.81	40.02	39.02	39.18	2084500	AAC	-11.86	-38.35705045	78122300									
6	A	20150107	39.52	39.81	39.29	39.7	3359600	AAN	-8.18	-26.75825973	179606700									
7	A	20150108	40.24	40.98	40.18	40.89	2116300	AAP	-8.77	-5.506027122	266930500									
8	A	20150109	41	41	40.29	40.59	1644900	AAT	-1.46	-3.667420246	48158100									
9	A	20150112	40.61	40.72	39.95	40.11	2771100	AAV	0.29	6.054279749	30229400									
10	A	20150113	40.47	40.7	39.33	39.55	2013400	AB	-1.88	-7.665505226	71403800									
11	A	20150114	39.03	39.1	38.21	39.06	5134000	ABB	-3.42	-16.17021277	532805500									
12	A	20150115	39.33	39.41	37.99	38.01	2630200	ABBV	-6.2	-9.474327628	2643021600									
13	A	20150116	37.86	38.46	37.76	38.25	3003900	ABC	13.55	15.02883762	516218400									
14	A	20150119	38.25	38.25	38.25	38.25	0	ABEV	-1.76	-28.29581994	3915345800									
15	A	20150120	38.43	38.66	37.76	37.93	5033600	ABG	-8.48	-11.16965227	82930400									
16	A	20150121	37.75	38.41	37.68	38.16	2721600	ABM	-0.18	-0.628272251	72539400									
17	A	20150122	38.51	39.86	38.12	39.65	4856500	ABR	0.38	5.612998523	37916900									
18	A	20150123	39.6	39.6	38.76	38.81	1519200	ABR-A	-0.49	-1.960784314	1243100									
19	A	20150126	38.79	39.17	38.47	39.15	1511200	ABR-B	-2.14	-8.663967611	1022000									
20	A	20150127	38.7	39.25	38.58	38.75	1703500	ABR-C	-0.12	-0.474495848	634000									
21	A	20150128	39.01	39.05	37.96	38	2033500	ABRN	0.1	0.0408163265	2109900									
22	A	20150129	38	38.47	37.69	38.46	2329900	ABT	-0.11	-0.244335851	1469310700									
23	A	20150130	38.01	38.32	37.71	37.77	3054300	ABX	-3.37	-31.34883721	4289215100									
24	A	20150202	37.9	38.76	37.71	38.69	2508400	AC	1	3.389830508	437700									
25	A	20150203	39.04	39.63	38.92	39.62	2950300	ACC	-0.02	-0.048355899	228980000									
26	A	20150204	39.33	39.46	38.82	39.11	2567400	ACCO	-1.88	-20.86570477	167330800									
27	A	20150205	39.22	39.82	39.22	39.53	1826300	ACH	-3.28	-28.4722222	35801000									
28	A	20150206	39.54	39.81	39.23	39.34	2697200	ACM	-0.34	-1.119525848	362299600									
29	A	20150209	39.23	39.43	38.95	39.04	3586100	ACN	15.19	17.00817378	625655000									
30	A	20150210	39.31	39.76	38.78	39.67	1408700	ACP	-3.76	-24.88418266	14348400									
31	A	20150211	39.64	39.81	39.23	39.33	3337000	ACRE	-0.04	-0.348432056	39118800									
32	A	20150212	39.58	40.06	39.53	40.02	1317700	ACV	-6.79	-27.21424886	11539300									
33	A	20150213	39.97	40.31	39.91	40.15	2211900	ACW	-2.68	-61.7512027	46092000									
34	A	20150216	40.15	40.15	40.15	40.15	0	ADC	2.9	9.327758122	27995400									
35	A	20150217	40.01	40.53	39.76	40.52	2875700	ADM	-19.32	-29.46153846	998224500									
36	A	20150218	41.12	42.2	40.91	41.54	9007200	ADPT	17.12	45.77540107	82504100									
37	A	20150219	41.4	41.57	41.04	41.15	3737300	ADS	-9.48	-3.314105926	108101200									
38	A	20150220	41.09	42.11	40.88	41.95	2971800	ADX	-0.85	-6.213450292	31402600									
39	A	20150223	41.89	41.96	41.49	41.73	1967900	AEB	0.85	2.768313458	4267500									
40	A	20150224	41.62	42.1	41.6	42.06	1922100	AED	0.45	1.770956316	4930700									
41	A	20150225	42.34	42.49	42.09	42.2	2343400	AEE	-2.9	-6.2865814	419963700									

2016 2015 2014 +

Select destination and press ENTER or choose Paste

2015:

Multiple.year.stock_data																				
Home		Insert		Draw		Page Layout		Formulas		Data		Review		View		Developer		Tell me		
OS		X	✓	fx																
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	ticker	<date>	<open>	<high>	<low>	<close>	<vol>	stockName	yearlyChange	percentChange	stockTotal			Stock	Value					
2	A	20140101	57.19	57.19	57.19	57.19	0	A	-0.62%	-28.410584	572978100			greatInStock	DLX	5581.15942				
3	A	20140102	57.1	57.1	56.15	56.21	1916100	AA	-5.64%	48.54186265	5161421000			greatDecStock	CBM	-95.72649573				
4	A	20140103	56.39	57.35	56.26	56.92	1866600	AA-B	1.34%	2.72856852	21618200			greatVolStock	BABA	21595474700				
5	A	20140106	57.4	57.7	56.56	56.64	1774400	AAC	10.92%	54.6	219879700									
6	A	20140107	56.95	57.63	56.93	57.45	1463200	AAN	1.17%	3.979591837	237293900									
7	A	20140108	57.33	58.54	57.17	58.39	2659400	AAP	48.4%	43.91037224	20037600									
8	A	20140109	58.4	58.68	57.87	58.41	1757600	AAT	8.38%	26.66242444	40207800									
9	A	20140110	58.51	59.01	58.14	58.93	1623300	AAV	0.45%	10.36866359	86658700									
10	A	20140113	58.77	59.1	58.6	58.93	2946700	AB	4.49%	21.04029991	83051600									
11	A	20140114	59.16	59.95	59.02	59.88	2562200	ABB	-5.41%	-20.3689759	466820000									
12	A	20140115	59.82	60.37	59.59	60.34	2335100	ABBV	12.63%	23.91952051	2303237600									
13	A	20140116	60.24	60.5	60.04	60.5	1835900	ABC	19.83%	28.23211492	428969000									
14	A	20140117	60.83	60.33	60.71	60.99	1769500	ABEV	-1.1%	-15.3714966	3208014300									
15	A	20140120	60.71	60.71	60.71	60.71	0	ABG	22.19%	41.27729494	81065600									
16	A	20140121	60.69	60.88	59.86	60.85	3008400	ABM	0.0%	0.209863588	52403000									
17	A	20140122	60.82	61.22	60.71	60.93	2769300	ABR	0.11%	1.651651652	28348400									
18	A	20140123	60.48	59.51	59.49	59.47	3063500	ABR-A	0.77%	3.179190751	1798500									
19	A	20140124	59.46	59.46	57.71	57.87	2656300	ABR-B	2.09%	9.243697479	1722000									
20	A	20140127	57.9	58.37	56.98	58.3	4669000	ABR-C	0.94%	3.86036961	1758200									
21	A	20140128	58.5	58.88	57.91	58.1	2536200	ABRN	0.49%	2.040613237	3451100									
22	A	20140129	57.67	58.22	57.41	57.65	2163000	ABT	6.69%	17.45369163	1516024700									
23	A	20140130	58.42	60.11	58.42	59.51	3743100	ABX	-6.88%	-39.02439024	3085372400									
24	A	20140131	58.61	59.15	58.05	58.15	3529000	ACC	9.15%	28.40732692	180543400									
25	A	20140203	58.15	58.48	56.08	56.15	2929200	ACCO	2.29%	34.07738095	223248000									
26	A	20140204	56.32	57.88	56.09	57.81	2911800	ACH	2.82%	32.4137931	34117500									
27	A	20140205	57.58	57.7	56.96	57.43	2283800	ACM	0.94%	3.194019708	303393900									
28	A	20140206	57.51	58.35	57.46	58.29	1609400	ACN	7.09%	8.623206033	705479100									
29	A	20140207	58.46	59.47	58.13	59.42	1975200	ACP	-2.47%	-14.05005688	14206700									
30	A	20140210	59.27	59.44	58.29	59.01	1760400	ACRE	1.62%	-12.36641221	44197000									
31	A	20140211	59	60	58.88	59.73	2148200	ACW	0.61%	15.3538874	60360500									
32	A	20140212	60	60.46	59.67	59.89	2347200	ADC	2.07%	7.133011716	16456400									
33	A	20140213	59.45	60.38	59.37	60.08	3097000	ADM	8.1%	19.8156862	899905700									
34	A	20140214	57.15	57.77	54.87	55.25	17862700	ADPT	12.24%	48.64684865	19722500									
35	A	20140217	55.25	55.25	55.25	55.25	0	ADS	23.12%	8.793219294	178760600									
36	A	20140218	55.38	56.04	54.96	55.15	6553800	ADX	0.61%	4.667176741	34090400									
37	A	20140219	55.01	56.65	54.9	55.94	4883700	AEB	3.8%	19.30894309	7019700									
38	A	20140220	56.14	57.54	56.05	57.29	4629700	AED	1.82%	7.715133531	9710300									
39	A	20140221	57.25	57.4	56.32	56.34	2407100	AEE	9.97%	27.57190265	412343900									
40	A	20140224	56.45	56.98	56.4	56.75	2392700	AEG	-1.98%	-20.88607595	245332800									
41	A	20140225	56.8	57.57	56.75	56.89	3375100	AEH	3.09%	8.0378086230	17897000									

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