

## Assignment 2

Figure 1.1 – Screenshot of the top section of worksheet 2018

E	F	G	H	I	J	K	L	M	N	O	P	Q
<low>	<close>	<vol>		Ticker	Yearly Change	Percentage change	Total Stock Volume				Ticker	Value
24.44	24.47	261879		AAB	-3.12	-12.77%	765628638			Greatest % Increase	THB	141.42%
24.22	24.28	15721045		AAF	-0.44	-7.45%	2348251513			Greatest % Decrease	RKS	-90.02%
24.27	24.28	5954		AAR	-0.32	-17.11%	44163252			Greatest Total Volume	QKN	1.68954E+12
24.22	24.33	58161100		AAT	5.33	42.44%	1121804					
24.28	24.72	267347		ABJ	0.2	0.47%	866724156					
24.64	24.64	1129348		ABK	1.61	4.80%	10391386					
24.57	24.68	5453423		ABKV	2.22	11.57%	5324614313					
24.68	24.85	14391		ABM	-1.16	-12.96%	1029560425					
24.71	24.86	13701		ACJ	-0.57	-3.70%	6169423					
24.79	24.79	101867		ACYQ	2.04	4.79%	234097825					
24.68	24.69	515155		ADB	-2.4	-8.34%	41980152					
24.67	24.86	657377		ADF	0.36	2.74%	13907867898					
24.71	24.71	1106987		AEL	2.33	5.11%	4339867319					
24.66	24.85	1418811		AEV	2.79	11.71%	843970					
24.8	24.84	52744		AEY	-0.08	-6.96%	8274367					
24.56	24.56	3545845		AFZ	0.35	2.70%	175801284					
24.54	24.66	3119820		AGF	-1.53	-2.46%	1903886691					
24.67	24.67	190060		AGJ	-0.17	-2.75%	1251599165					
24.62	24.68	594904		AGM	-0.21	-2.92%	36443510					
24.53	24.56	2373		AHAO	-0.16	-1.36%	6187850222					
24.41	24.47	134187		AHB	-4.78	-15.80%	25640283076					
24.48	24.66	372501		AIC	28.45	23.58%	3397556449					
24.54	24.58	5314		AIQ	0.2	1.71%	15477463					
24.2	24.2	336163		AIQF	0.01	0.47%	913229872					
24.24	24.36	7973461		AIQK	4.9	26.78%	315696267					
24.37	24.49	230014		AJA	0.48	21.72%	176690673					
24.28	24.28	641540		AJJ	0.69	0.65%	1852773					
24.23	24.29	21786910		AJK	2.12	28.61%	4706222269					
24.02	24.05	50989		AJL	0.15	1.16%	301470187					
23.93	23.97	63617		AJR	0.09	0.49%	533445954					
23.89	23.91	1745		AJS	5.2	29.08%	909864878					
23.85	23.88	20257		AKKV	-0.14	-1.70%	1026224221					
23.82	23.86	3673		AKUC	-3.44	-8.08%	2224320862					

Figure 1.2 – Screenshot of the bottom section of worksheet 2018

	B	C	D	E	F	G	H	I	J	K	L
1	<date>	<open>	<high>	<low>	<close>	<vol>		Ticker	Yearly Change	Percentage change	Total Stock Volume
2978	20181107	13.32	13.38	13.32	13.38	2746494		ZVK	-1.46	-5.15%	21606053419
2979	20181108	13.44	13.46	13.44	13.46	19356033		ZVNV	-9.3	-16.08%	54127797
2980	20181109	13.47	13.55	13.47	13.51	3206		ZVX	0.18	0.43%	5275017897
2981	20181112	13.59	13.63	13.55	13.56	91139		ZW	0.01	0.42%	17914023
2982	20181113	13.57	13.6	13.54	13.54	3608865		ZWE	2.63	23.34%	131745003
2983	20181114	13.57	13.57	13.51	13.52	8892827		ZWF	-7.11	-16.86%	178352583
2984	20181115	13.55	13.57	13.53	13.53	1.12E+08		ZWG	4.2	2.20%	264286635
2985	20181116	13.53	13.53	13.42	13.45	5010606		ZWV	-2.41	-6.64%	28337415588
2986	20181119	13.48	13.49	13.46	13.47	521781		ZWY	3.44	13.21%	39749752
2987	20181120	13.46	13.53	13.44	13.44	454777		ZX	5.22	11.92%	45533593081
2988	20181121	13.43	13.52	13.41	13.5	448602		ZXCE	4.05	2.39%	1032969666
2989	20181123	13.5	13.62	13.47	13.62	995905		ZXD	-1.39	-6.55%	1749020375
2990	20181126	13.61	13.69	13.61	13.67	946130		ZXF	1.46	3.97%	702485184
2991	20181127	13.7	13.73	13.62	13.62	60491726		ZXG	0.72	13.77%	4459665080
2992	20181128	13.63	13.66	13.56	13.62	1.33E+09		ZXK	-5.44	-3.62%	374196353
2993	20181129	13.61	13.74	13.61	13.72	2.04E+08		ZY	47.25	24.39%	514002909
2994	20181130	13.71	13.71	13.62	13.65	12219110		ZYGY	0.17	1.88%	8031841
2995	20181203	13.66	13.67	13.62	13.63	11986		ZYO	-0.45	-3.96%	173665542
2996	20181204	13.6	13.71	13.6	13.67	401437		ZYS	0.14	0.34%	259266754
2997	20181206	13.64	13.64	13.53	13.53	299102		ZYU	1.22	4.07%	2080282781
2998	20181207	13.54	13.6	13.52	13.53	18385122		ZZJB	-0.35	-10.00%	379403470
2999	20181210	13.51	13.57	13.48	13.49	1266263		ZZSI	0.45	2.53%	15761762
3000	20181211	13.5	13.54	13.49	13.53	35765810		ZZV	0.05	1.26%	474588350
3001	20181212	13.54	13.59	13.5	13.59	572543		ZZX	5.44	11.16%	2759067

Figure 2.1 – Screenshot of the top section of worksheet 2019

E	F	G	H	I	J	K	L	M	N	O	P	Q
<low>	<close>	<vol>		Ticker	Yearly Change	Percentage change	Total Stock Volume				Ticker	Value
21.23	21.23	10958		AAB	2.14	10.04%	241980347			Greatest % Increase	RYU	190.03%
21.06	21.1	2171964		AAF	-0.45	-8.23%	2818010087			Greatest % Decrease	RKS	-91.60%
20.96	21.03	3675		AAR	0.28	18.06%	121437103			Greatest Total Volume	ZQD	4.37301E+12
21.03	21.06	1325		AAT	-4.18	-23.54%	971117					
20.83	20.83	14382		ABJ	2.55	5.95%	6124743753					
20.91	21.03	7870		ABK	3.79	10.78%	13091029					
21	21.29	1225387		ABKV	3.94	18.33%	4024167824					
21.31	21.36	3404027		ABM	-0.22	-2.82%	581771223					
21.3	21.33	25837		ACJ	0.4	2.70%	5520801					
21.24	21.3	105596		ACYQ	-1.49	-3.34%	190645397					
21.29	21.35	1094876		ADB	-1.04	-3.95%	31106434					
21.27	21.27	203755		ADF	0.55	4.07%	8326026396					
21.18	21.3	9423		AEL	-0.09	-0.19%	12723838257					
21.12	21.12	220280		AEV	15.31	57.77%	310625					
21.14	21.24	5214		AEY	0.34	31.78%	16631656					
21.11	21.13	12912		AFZ	-0.09	-0.68%	59386345					
21.12	21.15	235681		AGF	-6.65	-10.97%	1814328505					
21.07	21.07	555		AGJ	3.3	55.00%	728384628					
21.01	21.03	557731		AGM	-0.38	-5.47%	48439209					
21.08	21.1	526084		AHAO	-0.78	-6.70%	10127862044					
20.95	21.11	186		AHB	-1.97	-7.74%	9219936469					
21.04	21.05	925610		AIC	-22.67	-15.28%	6835421909					
20.79	20.81	71848		AIQ	-0.12	-1.01%	9106431					
20.77	20.8	166496		AIQF	0.4	18.78%	888186772					
20.64	20.73	6969		AIQK	-0.38	-1.64%	301720349					
20.7	20.74	7588084		AJA	-0.08	-2.97%	152528235					
20.67	20.79	7134		AJJ	4.1	3.84%	550188					
20.71	20.83	33916		AJK	1.19	12.49%	3634766488					
20.8	20.91	2184		AJL	1.2	9.16%	224258605					
20.86	20.87	123943		AJR	-1.99	-10.66%	275937970					
20.8	20.81	677		AJS	-5.76	-24.85%	1265626692					
20.75	20.86	188376		AKKV	0.7	8.64%	988017508					
20.79	20.85	16546		AKUC	4.66	11.92%	1648179709					

Figure 2.2 – Screenshot of the bottom section of worksheet 2019

	B	C	D	E	F	G	H	I	J	K	L
1	<date>	<open>	<high>	<low>	<close>	<vol>		Ticker	Yearly Change	Percentage change	Total Stock Volume
2972	20191015	13.75	13.82	13.71	13.81	17716038		ZUI	-3.83	-10.53%	17216554
2973	20191016	13.77	13.89	13.77	13.89	1217036		ZUN	-0.32	-2.38%	326789512
2974	20191017	13.88	13.9	13.76	13.78	2321919		ZUV	4.66	4.43%	5868101320
2975	20191018	13.77	13.81	13.76	13.76	1568356		ZVAX	0.04	0.57%	416458015
2976	20191021	13.76	13.91	13.76	13.91	3014642		ZVE	0.42	4.16%	332872520
2977	20191022	13.92	13.92	13.85	13.85	19331597		ZVG	0.51	5.57%	1343094071
2978	20191023	13.89	13.92	13.85	13.85	303235		ZVK	1.39	5.17%	7349704483
2979	20191024	13.88	13.91	13.85	13.88	261506		ZVNV	-4.34	-8.94%	125616230
2980	20191025	13.91	13.96	13.91	13.94	40033917		ZVX	-0.77	-1.82%	26747157379
2981	20191028	13.9	13.95	13.9	13.95	3.85E+08		ZW	0.02	0.84%	25126421
2982	20191029	13.98	14.07	13.93	14.07	4819150		ZWE	-3.22	-23.22%	76565659
2983	20191030	14.05	14.17	14.04	14.13	65035		ZWF	1.61	4.59%	70673013
2984	20191031	14.14	14.15	14.09	14.09	39997602		ZWG	2.5	1.28%	208070600
2985	20191101	14.13	14.13	14.07	14.08	1518013		ZWV	0.31	0.92%	23403157743
2986	20191104	14.05	14.06	13.94	13.94	3000131		ZWY	2.71	9.22%	19417357
2987	20191105	13.95	13.97	13.94	13.97	2680505		ZX	-2.15	-4.39%	36169714837
2988	20191106	13.94	13.97	13.91	13.96	13558		ZXCE	17.31	9.97%	1053107203
2989	20191107	13.96	14	13.95	13.99	11201641		ZXD	1.26	6.35%	1048184450
2990	20191108	14.01	14.08	13.99	14.04	9870078		ZXF	-1.72	-4.50%	708610676
2991	20191111	14.05	14.05	13.92	13.99	597714		ZXG	-0.17	-2.85%	9344987129
2992	20191112	13.98	14.02	13.95	14.01	53670		ZXK	-3.37	-2.33%	81457566
2993	20191113	14.02	14.05	13.99	13.99	165245		ZY	-10.32	-4.27%	606120088
2994	20191114	13.98	14	13.91	13.96	2223544		ZYGY	-0.24	-2.60%	3193276
2995	20191115	13.95	14.06	13.95	14.06	24038188		ZYO	0.07	0.64%	128438866
2996	20191118	14.03	14.13	14.03	14.09	8431761		ZYS	-0.66	-1.60%	236779156
2997	20191119	14.12	14.14	14.07	14.08	5396780		ZYU	-1.32	-4.23%	3801577568
2998	20191120	14.1	14.16	14.07	14.16	321676		ZZIB	-0.23	-7.30%	449950956
2999	20191121	14.18	14.18	14.07	14.1	2871615		ZZSI	-1.88	-10.35%	17999992
3000	20191122	14.09	14.09	14.02	14.02	13822837		ZZV	0.56	13.93%	192351563
3001	20191125	14.02	14.02	13.97	14.01	8.31E+08		ZZX	2.66	4.91%	4669920

Figure 3.1 – Screenshot of the top section of worksheet 2020

E	F	G	H	I	J	K	L	M	N	O	P	Q
<low>	<close>	<vol>		Ticker	Yearly Change	Percentage change	Total Stock Volume				Ticker	Value
23.43	23.57	28522		AAB	-0.17	-0.73%	455750984			Greatest % Increase	YDI	188.76%
23.43	23.44	1399		AAF	0.18	3.59%	2080570716			Greatest % Decrease	VNG	-89.05%
23.37	23.39	2953		AAR	0.42	22.95%	39905528			Greatest Total Volume	QKN	3.45296E+12
23.28	23.47	64755		AAT	-2.76	-20.19%	843410					
23.4	23.58	8534		ABJ	2.41	5.29%	1227953758					
23.6	23.71	62083971		ABK	-0.73	-1.87%	9527549					
23.52	23.55	7524		ABKV	-3.53	-13.83%	4402222603					
23.57	23.77	76550		ABM	-0.91	-11.99%	593492721					
23.67	23.67	5781390		ACJ	-0.45	-2.96%	6081487					
23.61	23.76	53283		ACYQ	0.31	0.72%	285144917					
23.8	23.98	2796350		ADB	-0.68	-2.69%	34526036					
23.79	23.82	809847		ADF	2.18	15.53%	22708794844					
23.61	23.65	37674		AEL	3.33	6.96%	5115026297					
23.54	23.68	681		AEV	-8.75	-20.85%	196083					
23.56	23.58	14342		AEY	0.08	5.67%	14067649					
23.5	23.59	37839		AFZ	0.3	2.27%	33091017					
23.58	23.73	315691		AGF	0.25	0.46%	2613841972					
23.65	23.65	37896		AGJ	-1.83	-19.57%	470205509					
23.51	23.59	122379		AGM	0.26	3.96%	289582207					
23.31	23.32	2156		AHAO	0.21	1.93%	5606228557					
23.38	23.53	6958347		AHB	0.94	4.01%	24449788347					
23.46	23.62	19206		AIC	-2.47	-1.96%	3756341852					
23.47	23.47	5012		AIQ	-0.11	-0.93%	12394637					
23.32	23.33	353963		AIQF	-0.48	-18.97%	319058376					
23.29	23.37	6413149		AIQK	3.44	15.05%	236740388					
23.37	23.38	70645		AJA	-0.12	-4.58%	310788310					
23.26	23.3	26125		AJJ	0.88	0.79%	898554					
23.2	23.23	8271		AJK	1.41	13.17%	2250415159					
22.96	22.96	69241		AJL	-0.35	-2.45%	518107825					
22.95	22.96	49883		AJR	-0.6	-3.60%	214083191					
22.86	22.92	78316		AJS	0.69	3.95%	936458598					
22.76	22.85	2829		AKKV	-0.9	-10.26%	933997032					
22.69	22.78	263141		AKUC	-4.3	-9.81%	2138977083					

Figure 3.2 – Screenshot of the bottom section of worksheet 2020

1	<date>	<open>	<high>	<low>	<close>	<vol>	Ticker	Yearly Change	Percentage change	Total Stock Volume
2976	20201005	16.47	16.53	16.44	16.5	3.53E+08	ZVE	-0.54	-5.14%	13673973
2977	20201006	16.53	16.53	16.41	16.41	3.78E+08	ZVG	-0.21	-2.17%	4035653689
2978	20201007	16.45	16.57	16.45	16.56	2.9E+08	ZVK	1.85	6.55%	8348562293
2979	20201008	16.6	16.64	16.6	16.64	1389865	ZVNV	1.59	3.61%	225944344
2980	20201009	16.63	16.66	16.61	16.61	7221605	ZVX	-1.54	-3.71%	2067255051
2981	20201012	16.58	16.58	16.49	16.53	20142051	ZW	0.02	0.83%	20479378
2982	20201013	16.58	16.58	16.53	16.57	1484008	ZWE	1.71	16.12%	143618898
2983	20201014	16.59	16.61	16.54	16.54	1680011	ZWF	1.39	3.79%	191558268
2984	20201015	16.59	16.61	16.51	16.51	2335301	ZWG	-3.93	-1.99%	186513315
2985	20201016	16.52	16.55	16.4	16.4	93953946	ZWV	-1.28	-3.75%	64731268695
2986	20201019	16.38	16.46	16.33	16.46	17903536	ZWY	-2.1	-6.52%	18168152
2987	20201020	16.45	16.47	16.4	16.44	7635127	ZX	3.47	7.44%	47273029540
2988	20201021	16.47	16.56	16.45	16.49	311872	ZXCE	0.18	0.09%	756504474
2989	20201022	16.47	16.53	16.47	16.5	51736	ZXD	0.01	0.05%	2315465410
2990	20201023	16.51	16.61	16.5	16.55	2780673	ZXF	-0.43	-1.18%	410491596
2991	20201026	16.53	16.53	16.41	16.43	25123255	ZXG	-0.25	-4.32%	3281529669
2992	20201027	16.39	16.4	16.35	16.4	3001424	ZXK	-3.01	-2.12%	58003168
2993	20201028	16.38	16.44	16.37	16.44	4490262	ZY	14.65	6.34%	581988988
2994	20201029	16.47	16.49	16.43	16.46	16555	ZYGY	0.7	7.79%	2801621
2995	20201030	16.45	16.45	16.3	16.3	8672348	ZYO	0.65	5.90%	131222230
2996	20201102	16.29	16.3	16.21	16.23	929042	ZYS	-0.42	-1.04%	160534698
2997	20201103	16.21	16.21	16.07	16.07	8451551	ZYU	-0.06	-0.20%	2276517418
2998	20201104	16.07	16.07	15.94	15.94	7399618	ZZJB	-0.04	-1.37%	1801611825
2999	20201105	15.98	15.98	15.9	15.95	21960244	ZZSI	-0.26	-1.60%	8936222
3000	20201106	15.94	15.96	15.88	15.89	435495	ZZV	0.04	0.87%	245325291
3001	20201109	15.9	15.91	15.85	15.9	59599	ZZX	-3.47	-6.11%	3317220