

# Screenshots of the results:

Created a script that loops through all the stocks for each quarter and outputs the following information:

The ticker symbol.

Quarterly change from the opening price at the beginning of a given quarter to the closing price at the end of that quarter.

The percentage changes from the opening price at the beginning of a given quarter to the closing price at the end of that quarter.

The total stock volume of the stock. The result should match the following image:

Add functionality to your script to return the stock with the "Greatest % increase", "Greatest % decrease", and "Greatest total volume". The solution should match the following image.

Q1:

Q7																		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	<tickers>	<date>	<open>	<high>	<low>	<close>	<vol>		Ticker	Quarterly Change	Percent Change	Total Stock Volume						
2	AAF	1/2/2022	5.02	5.05	5.02	5.03	879382		AAF	0.05	1.00%	752812510		Greatest % Increase	Ticker	Value		
3	AAF	1/3/2022	5.01	5.01	4.98	5.01	6907		AAR	0.14	7.65%	8865652		Greatest % Decrease	VNG	-77.83%		
4	AAF	1/6/2022	5.01	5.01	4.98	4.98	2503582		ABJ	0.81	1.78%	141569994		Greatest Total Volume	HK	2.64E+11		
5	AAF	1/7/2022	4.96	5	4.96	4.99	161914		ABK	-0.82	-2.11%	4876577						
6	AAF	1/8/2022	4.98	4.99	4.97	4.98	563307		ABKV	1.58	6.19%	967446696						
7	AAF	1/9/2022	4.98	4.99	4.96	4.96	187523		ACJ	0.06	0.39%	1503284						
8	AAF	1/10/2022	4.97	4.99	4.93	4.95	2295067		ADB	0.12	0.47%	8100755		Reset				
9	AAF	1/13/2022	4.95	5	4.95	5	724593		AEV	2.27	5.41%	37848						
10	AAF	1/14/2022	5	5.03	4.99	4.99	147386		AEY	0.01	0.71%	3813328						
11	AAF	1/15/2022	5.01	5.03	4.98	5.03	6977393		AGF	-0.37	-0.68%	776480046						
12	AAF	1/16/2022	5.02	5.04	5	5	209779		AHAO	0.01	0.09%	567614264		Print Ticker to Total stock volume				
13	AAF	1/17/2022	5	5.02	4.98	4.98	396340		AIQ	0.00	0.00%	1959736						
14	AAF	1/21/2022	4.98	4.98	4.93	4.95	41545		AIQK	2.40	10.50%	65297991						
15	AAF	1/22/2022	4.93	4.95	4.89	4.89	20380		AJJ	1.28	1.15%	71012						
16	AAF	1/23/2022	4.89	4.91	4.89	4.91	360920		AJL	-0.14	-0.98%	96387487						
17	AAF	1/24/2022	4.89	4.89	4.86	4.89	202596		AJR	-0.47	-2.82%	69879769						
18	AAF	1/27/2022	4.89	4.96	4.88	4.96	107172433		AJS	-0.32	-1.83%	178949374		Print Stock increase, decrease,total volume				
19	AAF	1/28/2022	4.96	4.96	4.95	4.96	237208		AKKV	-0.19	-2.17%	314521449						
20	AAF	1/29/2022	4.96	5	4.96	4.97	26448010		AKUC	-3.33	-7.59%	304714155						
21	AAF	1/30/2022	4.97	4.97	4.94	4.95	200506		ANO	0.21	0.39%	131090752						
22	AAF	1/31/2022	4.94	4.94	4.91	4.92	125462		ANQ	0.15	1.79%	174506248						
23	AAF	2/3/2022	4.91	4.91	4.88	4.88	113514		ANVE	-0.32	-0.90%	120720960						
24	AAF	2/4/2022	4.9	4.94	4.9	4.94	6459377		AORS	-0.52	-6.30%	822422742						
25	AAF	2/5/2022	4.93	4.98	4.93	4.95	1141175		APM	-5.12	-6.16%	28090822						
26	AAF	2/6/2022	4.95	4.97	4.95	4.96	9584622		AQA	-0.03	-1.02%	35324348						
27	>	Q1	Q2	Q3	Q4	+												

I	J	K	L	M	N	O	P	Q	R	S	T
Ticker	Quarterly Change	Percent Change	Total Stock Volume			Ticker	Value				
AAF	0.05	1.00%	752812510		Greatest % Increase	MSE	47.01%				
AAR	0.14	7.65%	8865652		Greatest % Decrease	VNG	-77.83%				
ABJ	0.81	1.78%	141569994		Greatest Total Volume	HK	2.64E+11				
ABK	-0.82	-2.11%	4876577								
ABKV	1.58	6.19%	967446696								
ACJ	0.06	0.39%	1503284		Reset						
ADB	0.12	0.47%	8100755								
AEV	-2.27	-5.41%	37848								
AEY	0.01	0.71%	3813328								
AGF	-0.37	-0.68%	776480046		Print Ticker to Total stock volume						
AHAO	0.01	0.09%	567614264								
AIQ	0.00	0.00%	1959736								
AIQK	2.40	10.50%	65297991								
AJJ	1.28	1.15%	71012								
AJL	-0.14	-0.98%	96387487								
AJR	-0.47	-2.82%	69879769								
AJS	-0.32	-1.83%	178949374		Print Stock increase, decrease,total volume						
AKKV	-0.19	-2.17%	314521449								
AKUC	-3.33	-7.59%	304714155								
ANO	0.21	0.39%	131090752								
ANQ	0.15	1.79%	174506248								
ANVE	-0.32	-0.90%	120720960								
AORS	-0.52	-6.30%	822422742								
APM	-5.12	-6.16%	28090822								
AQA	-0.03	-1.02%	35324348								



Q3:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	<ticker>	<date>	<open>	<high>	<low>	<close>	<vol>		Ticker	Quarterly Change	Percent Change	Total Stock Volume								
2	AAF	7/1/2022	5.38	5.44	5.38	5.44	333664		AAF	0.16	2.97%	812229324		Greatest % Increase	YH	37.21%				
3	AAF	7/2/2022	5.44	5.46	5.43	5.45	40777		AAR	0.13	6.37%	13282359		Greatest % Decrease	BGI	-47.15%				
4	AAF	7/6/2022	5.47	5.48	5.44	5.47	10592		ABJ	-2.10	-4.37%	983632290		Greatest Total Volume	HK	4.80E+11				
5	AAF	7/7/2022	5.46	5.5	5.46	5.49	960770		ABK	0.27	0.71%	1182567								
6	AAF	7/8/2022	5.49	5.53	5.48	5.5	297757		ABKV	-0.58	-2.28%	1262340775								
7	AAF	7/9/2022	5.49	5.49	5.41	5.41	4344806		ACJ	0.03	0.20%	1358080								
8	AAF	7/10/2022	5.42	5.42	5.37	5.37	210702		ADB	0.03	0.12%	8782076								
9	AAF	7/13/2022	5.38	5.4	5.37	5.39	1023574		AEV	1.76	5.77%	45218								
10	AAF	7/14/2022	5.38	5.42	5.38	5.42	7599		AEY	0.05	3.57%	2180837								
11	AAF	7/15/2022	5.44	5.47	5.44	5.47	23718054		AGF	0.02	0.04%	794391378								
12	AAF	7/16/2022	5.47	5.49	5.46	5.49	1567039		AHAO	0.22	2.10%	3366198572								
13	AAF	7/17/2022	5.49	5.54	5.49	5.5	6540703		AIQ	0.15	1.29%	6285184								
14	AAF	7/20/2022	5.52	5.52	5.46	5.46	2488667		AIQK	2.82	12.05%	56944349								
15	AAF	7/21/2022	5.47	5.47	5.42	5.43	191890		AJJ	-0.88	-0.78%	138017								
16	AAF	7/22/2022	5.42	5.43	5.41	5.43	2526282		AJL	0.07	0.50%	161335262								
17	AAF	7/23/2022	5.43	5.44	5.41	5.41	89544		AJR	-0.24	-1.46%	34726033								
18	AAF	7/24/2022	5.43	5.43	5.37	5.37	1256290		AJS	2.00	12.63%	261384589								
19	AAF	7/27/2022	5.39	5.44	5.39	5.44	211198		AKKV	-0.09	-1.12%	152827525								
20	AAF	7/28/2022	5.45	5.49	5.45	5.49	1543380		AKUC	-1.77	-4.09%	1009976826								
21	AAF	7/29/2022	5.5	5.51	5.47	5.47	14555546		ANO	-2.67	-5.29%	104330678								
22	AAF	7/30/2022	5.47	5.5	5.46	5.48	4326414		ANQ	-0.20	-2.35%	97971983								
23	AAF	7/31/2022	5.47	5.49	5.46	5.47	113868		ANVE	-0.09	-0.26%	86733959								
24	AAF	8/3/2022	5.47	5.47	5.46	5.46	1570087		AORS	-0.03	-0.41%	294265718								
25	AAF	8/4/2022	5.46	5.49	5.44	5.45	92877		APM	-7.84	-8.63%	54328089								
26	AAF	8/5/2022	5.44	5.44	5.4	5.44	131325		AQA	0.01	0.34%	18535684								
27	AAF	8/6/2022	5.44	5.46	5.44	5.46	715173		AQVM	-0.44	-7.93%	22817802								

	I	J	K	L	M	N	O	P	Q	R	S	T
1	Ticker	Quarterly Change	Percent Change	Total Stock Volume			Ticker	Value				
2	AAF	0.16	2.97%	812229324		Greatest % Increase	YH	37.21%				
3	AAR	0.13	6.37%	13282359		Greatest % Decrease	BGI	-47.15%				
4	ABJ	-2.10	-4.37%	983632290		Greatest Total Volume	HK	4.80E+11				
5	ABK	0.27	0.71%	1182567								
6	ABKV	-0.58	-2.28%	1262340775								
7	ACJ	0.03	0.20%	1358080								
8	ADB	0.03	0.12%	8782076								
9	AEV	1.76	5.77%	45218								
10	AEY	0.05	3.57%	2180837								
11	AGF	0.02	0.04%	794391378								
12	AHAO	0.22	2.10%	3366198572								
13	AIQ	0.15	1.29%	6285184								
14	AIQK	2.82	12.05%	56944349								
15	AJJ	-0.88	-0.78%	138017								
16	AJL	0.07	0.50%	161335262								
17	AJR	-0.24	-1.46%	34726033								
18	AJS	2.00	12.63%	261384589								
19	AKKV	-0.09	-1.12%	152827525								
20	AKUC	-1.77	-4.09%	1009976826								
21	ANO	-2.67	-5.29%	104330678								
22	ANQ	-0.20	-2.35%	97971983								
23	ANVE	-0.09	-0.26%	86733959								
24	AORS	-0.03	-0.41%	294265718								
25	APM	-7.84	-8.63%	54328089								
26	AQA	0.01	0.34%	18535684								
27	AQVM	-0.44	-7.93%	22817802								

Q4:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	<ticker>	<date>	<open>	<high>	<low>	<close>	<vol>		Ticker	Quarterly Change	Percent Change	Total Stock Volume							
2	AAF	10/1/2022	5.53	5.56	5.53	5.56	10212793		AAF	-0.33	-5.97%	283924051		Greatest % Increase	MSE	66.35%			
3	AAF	10/2/2022	5.54	5.55	5.52	5.55	582073		AAR	0.09	4.17%	7180097		Greatest % Decrease	RKS	-42.47%			
4	AAF	10/5/2022	5.53	5.55	5.51	5.51	791312		ABJ	1.95	4.24%	57167862		Greatest Total Volume	HK	2.50E+11			
5	AAF	10/6/2022	5.53	5.54	5.51	5.54	137612		ABK	0.22	0.58%	1713143							
6	AAF	10/7/2022	5.55	5.55	5.52	5.53	4141794		ABKV	-2.78	-11.22%	1325081594							
7	AAF	10/8/2022	5.53	5.53	5.49	5.53	2340485		ACJ	-0.29	-1.93%	2007080							
8	AAF	10/9/2022	5.52	5.56	5.51	5.56	863156		ADB	-0.86	-3.38%	8956020							
9	AAF	10/12/2022	5.52	5.52	5.5	5.5	1401089		AEV	0.89	2.75%	47488							
10	AAF	10/13/2022	5.5	5.51	5.48	5.51	1596798		AEY	0.04	2.76%	4298758							
11	AAF	10/14/2022	5.51	5.52	5.49	5.52	47918		AGF	-0.38	-0.69%	505213611							
12	AAF	10/15/2022	5.51	5.51	5.48	5.49	346706		AHAO	0.37	3.46%	1160273140							
13	AAF	10/16/2022	5.48	5.52	5.48	5.5	232992		AIQ	-0.11	-0.93%	1230859							
14	AAF	10/19/2022	5.48	5.48	5.43	5.45	298970		AIQK	0.21	0.80%	66485266							
15	AAF	10/20/2022	5.45	5.49	5.45	5.49	10289359		AJJ	0.00	0.00%	134670							
16	AAF	10/21/2022	5.48	5.48	5.46	5.47	1241587		AJL	-0.20	-1.41%	162249647							
17	AAF	10/22/2022	5.46	5.47	5.44	5.46	110568		AJR	-0.12	-0.74%	53697777							
18	AAF	10/23/2022	5.46	5.46	5.41	5.41	1422918		AJS	0.22	1.23%	289650220							
19	AAF	10/26/2022	5.39	5.42	5.39	5.41	2837521		AKKV	-0.11	-1.38%	108536855							
20	AAF	10/27/2022	5.4	5.44	5.4	5.43	8448407		AKUC	-1.95	-4.70%	320975640							
21	AAF	10/28/2022	5.41	5.42	5.38	5.42	150170		ANO	-0.45	-0.95%	234024374							
22	AAF	10/29/2022	5.41	5.44	5.41	5.44	6159535		ANQ	-0.07	-0.84%	160411134							
23	AAF	10/30/2022	5.44	5.45	5.41	5.44	807481		ANVE	1.49	4.29%	255254835							
24	AAF	11/2/2022	5.44	5.44	5.37	5.38	10928362		AORS	-0.07	-0.95%	246196717							
25	AAF	11/3/2022	5.4	5.42	5.38	5.4	355773		APM	-0.21	-0.25%	43103336							
26	AAF	11/4/2022	5.41	5.43	5.39	5.4	15058496		AQA	-0.15	-5.08%	20844579							
27	AAF	11/6/2022	5.41	5.43	5.4	5.4	11741011		AQVM	-0.36	-6.81%	11741011							

I	J	K	L	M	N	O	P	Q	R	S	T
Ticker	Quarterly Change	Percent Change	Total Stock Volume			Ticker	Value				
AAF	-0.33	-5.97%	283924051		Greatest % Increase	MSE	66.35%				
AAR	0.09	4.17%	7180097		Greatest % Decrease	RKS	-42.47%				
ABJ	1.95	4.24%	57167862		Greatest Total Volume	HK	2.50E+11				
ABK	0.22	0.58%	1713143								
ABKV	-2.78	-11.22%	1325081594								
ACJ	-0.29	-1.93%	2007080								
ADB	-0.86	-3.38%	8956020								
AEV	0.89	2.75%	47488								
AEY	0.04	2.76%	4298758								
AGF	-0.38	-0.69%	505213611								
AHAO	0.37	3.46%	1160273140								
AIQ	-0.11	-0.93%	1230859								
AIQK	0.21	0.80%	66485266								
AJJ	0.00	0.00%	134670								
AJL	-0.20	-1.41%	162249647								
AJR	-0.12	-0.74%	53697777								
AJS	0.22	1.23%	289650220								
AKKV	-0.11	-1.38%	108536855								
AKUC	-1.95	-4.70%	320975640								
ANO	-0.45	-0.95%	234024374								
ANQ	-0.07	-0.84%	160411134								
ANVE	1.49	4.29%	255254835								
AORS	-0.07	-0.95%	246196717								
APM	-0.21	-0.25%	43103336								
AQA	-0.15	-5.08%	20844579								
AQVM	-0.36	-6.81%	11741011								