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Course Name: Investments

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Assignment Title: Group
Assignment 1

Group Number: #27

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- That the work is original, and due credit is given to others where appropriate.
- That all members have contributed substantially and proportionally to each group assignment.
- That all members have sufficient familiarity with the entire contents of the group assignment so as to be able to sign off on them as original work.
- Acceptance and acknowledgement that the team is collectively responsible for assignments found to be plagiarized in any way, and every member will be subject to sanctions under the University's Code of Behaviour on Academic Matters.

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RSM 336

Portfolio Investment Report

Group 27

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Executive Summary

“Although over the short-term Mr. Market may price stocks based on emotion, over the long-term Mr. Market prices stocks based on their value.” -- Joel Greenblatt (Greenblatt, 2006)

With the global outbreak of COVID-19, 2020 was a difficult year for investors. With the most significant market plunge since 2008, the international economy is in stagnation. With the benchmark down ~32% over the past months, our portfolio, which mainly consisted of high-risk value stocks, suffered a worse loss of ~33%. We had to temporarily reduce the weighting of stocks and increase the weightings of bonds for the time period to hedge part of our portfolio. As of March 20, our portfolio was at ~671k with cash, bond, and stock taking up 25%, 21%, 54%, respectively (**Appendix 1**). However, as we had quoted Mr. Greenblatt, our outlook for the long-term future remains positive. Once the fear factor of the global pandemics is lifted, we expect Mr. Market to regain its rationale.

Investment Strategy

Throughout the trading period, the group followed consistent trading strategies which were outlined in the initial proposal. As value investors, we often take a contrarian view as the market which in times of high market volatility can translate to greater risk. All the value stocks added into the portfolio were screened from *FactSet* using a strict set of criteria (**Appendix 2**). Closely following *Benjamin Graham*'s investing principal, we focused on small-cap stocks with low P/BV and P/E multiples. From the initial screening, only stocks with P/E, P/BV, EV/EBITDA, Net Debt/EBITDA of 15x, 3x, 15x, 2.5x, respectively, are passed down for secondary screening where the group would conduct further research on the quality of the business. Trades are only made if

we believe the company possesses a durable moat. As a result, our portfolio is only diversified among 10 value stocks (**Appendix 3**) throughout the period. Quoting Peter Lynch:

“Know what you own and know why you own it.” (Lynch, 2000)

We prefer owning shares in 10 companies which we know really well, rather than 30 companies we know mediocrely.

Due to the unique time period, we had seen the S&P suffering the biggest weekly plunge of 11.5% at the end of February (Veiga & Troise, 2020). As a result, investors are no longer confident in the market. Our value portfolio saw a ~25% drop in price in a week, which is comparable with a ~18% drop of Russell 3000 benchmark around the same time period¹. Being contrarian investors with a long-term orientation, we kept our positions and even increased holding in some companies, as we viewed the market drop as a buy-low-sell-high opportunity. With the risk-reward tradeoff, we understand that by betting on small-cap value stocks, we are also taking on higher risks. However, we are quite confident with our individual picks of value stocks and believe their value will be realized in a 3-5 year horizon.

In accordance with our contrarian view, we also experimented with special situation investing as popularized by Joel Greenblatt. In the case with **HPQ (HP Inc.)**, we saw an opportunity to potentially make a small profit with HP's stock when American printing giant **XEROX (TICK: XRX)**, made tender offer to acquire HP for \$24/share (with \$18.40 in cash and the remainder in Xerox shares) (Carrasqueira, 2020). With HP's stock trading way below the

¹ This is the period following the market crash from March 5 to March 12.

bidding price, we had invested a small amount of our money into HPQ and were quite confident with a \$2/share realizable profit by the end of April.

As part of our investment philosophy, we focus on relative performance rather than absolute performance. Quoting from Kim Shannon,

“Relative-value managers keep the amount of cash in their portfolios at no more than a set maximum by forcing themselves to buy stocks that are comparatively the best value ... in order to remain invested in the market.” (Kim, 2015)

We believe in the rule of consistency, which is why we remain loyal to the fundamental, value approach with our portfolio.

Portfolio Performance

❖ Overall Performance

For the investment project, our group generated a negative return of **-32.88%** and failed to beat the benchmark (total return = **-31.14%**) at the end of the trading time horizon (Mar. 20th). Consequently, we had **0** for both the Sharpe ratio and the Sortino ratio as the system cannot come up with exact ratios with a negative return. (**Appendix 4**)

❖ Systematic Risk

According to data collected, we had a beta of **0.9423**, close to but smaller than 1. We had taken less systematic risk than the market and thus there was no additional reward for the risks. With this beta, our portfolio movement basically followed the market index.

❖ Contribution of Country selection

Since the spread of coronavirus was unnerving and has increased uncertainty of the future, the Canadian and U.S financial markets have been bearish and volatile (Balji, 2020). These unexpected events contributed to most losses because about half of our capital was invested in the stock market of Canada and the US. To be specific, our investment has a return of **-26.05%** for the US sector and **-4.69%** for the CA sector. Also, we were exposed to currency risk of US dollars and the recent depreciation of Canadian dollars (Smith, 2020) (**Appendix 5**)

❖ Contribution of Industry Sector / Security Specific selection

With further analysis, CLNE.O (Clean Energy Fuels Corp) was the stock with the worst return, **-13.03%**. It belonged to the U.S market and was affected by the virus outbreak. The price war of oil between Russia and Saudi Arabia that resulted in dropped oil prices has negatively affected the US's energy sector. Investors were alarmed and took back their investments, which drives stock prices down (Dezember, 2020). Besides, Vanguard Small-Cap Value ETF is our biggest winner, with about a **5%** return. (**Appendix 6**)

*All data are retrieved on Mar.29th.

Key Learnings

❖ Factors Resulting in Poor Performance

Overall, our portfolio did not perform well since we did not get the reward for the risk we undertook. The main factor resulting in poor performance is that value stocks do not perform well when a recession occurs. We chose a value investing strategy since we expected growth in the global economy at the beginning of the year. As previously discussed in the *Key Strategies* section, we still hold a positive outlook with value investing in the long run.

❖ Task Allocation

Using a top-down approach, we had Vicky and Jessica focusing on primary screening while Cindy and Daisy focused on secondary screening. Consequently, everyone in the group had to keep a close eye on corporate news as well as current market trends. Once potential companies were selected after the secondary screening, we would start conducting in-depth research on individual companies. As we reported important information in our group chats promptly, we were able to increase our productivity.

❖ Improvements

When deciding what strategy we are going to use, we were too optimistic about the market and did not have back-up plans for recession. Our portfolio was heavily affected by the stagnation in the global economy. In the future, we would analyze the market more carefully to make sure we would have different contingencies for different market situations. After finding the market was bearish, we reduced the proportion of stocks we held and added more bonds. As much as we attempted to remain rational when making decisions during the market downturns, we suffered from mental biases. After observing significant drops in prices with some stocks, we became doubtful of our initial position and sold off some of our positions. It was clear that some stocks (ie HIU.TO) were sold off too early and they outperformed the market after bouncing back. This is a valuable learning experience as we now understand the importance of rational investing and are more aware of mental biases within behavioral finance.

Conclusion

Although the uncertainty of recent global events has cast doubt on the future of the financial market, it behooves the savvy investor to consider the situation as inherently fluid and construct a

measured and long-term strategy rather than submit to the temptations of a short-term, reactive approach. Having acknowledged the most substantive economic downturn since 2008, one's instincts call for massive liquidations to minimize the damage of abrupt devaluation, especially in light of our portfolio's original composition, which consisted of a disproportionate emphasis on high-risk value stocks. With a loss of ~33%, we chose to focus on the implementation of a strategy to reallocate our existing resources towards investments with greater stability during this period of global uncertainty. With an increased weighting on bonds, our position in late March included a fund valuation of ~671k, with 25% cash, 21% bond, and 54% stock, which is still an aggressive stance relative to competing funds, but relatively conservative in light of our traditional contrarian view on stock valuation. While global uncertainty insists on a strategic retreat to some degree, it is important to react to changing market conditions in a manner somewhat consistent with the ideological underpinnings of the firm itself. Therefore, once the health pandemic has been resolved and the market regains traction, Mr. Market will be poised to capitalize on the inevitable period of economic rejuvenation that is hopefully on the very near horizon.

Appendices

Appendix 1. Asset Classes Allocation

Asset Class	Absolute Value (\$USD)	Percent
Cash	173100.4254	25.01%
Stock	371412.1011	53.66%
Bond	147649.4729	21.33%
Total	692161.9994	1

Appendix 2. Screening Criteria on FactSet

Search Items	Summary
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Search Parameters and Logic (7)

P1. Company Type:
Included: Public

P2. Price to Earnings:
4.00x to 15.00x

P3. Enterprise Value to EBITDA :
4.00x to 15.00x

P4. Price to Book Value:
<= 2.50x

P5. Stock Exchange:
Included: North America

P6. Net Debt/EBITDA:
<= 2.50

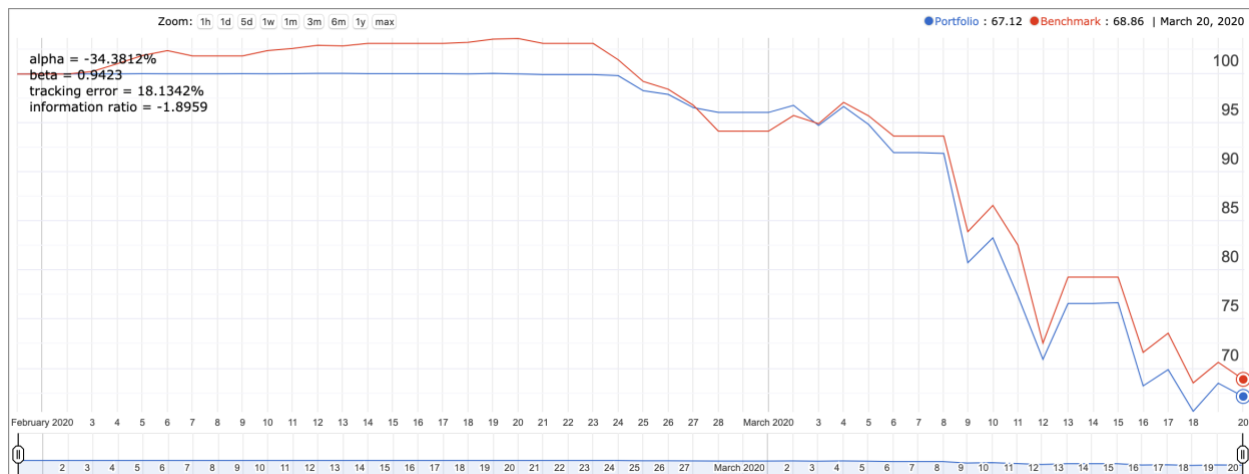
P7. Market Capitalization (MM):
<= 1,500.00

Logic = (P1 AND P5 AND P7 AND P3 AND P4 AND P2 AND P6)

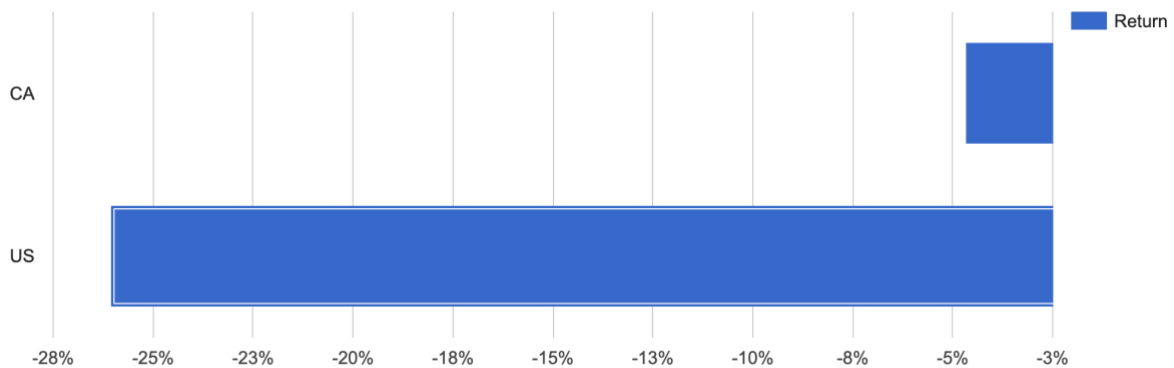
Appendix 3. Transaction History of Value Stocks

Value Stock Transactions							
ticker	volume	price	type	net	currency	country	timestamp
NOA.TO	-10500	8.45	Stock	88725	CAD	CA	2020-03-20 12:19:27 PM
UAN	-20000	0.88	Stock	17600	USD	US	2020-03-20 9:30:28 AM
CRC	-10000	3.1	Stock	31000	USD	US	2020-03-19 12:46:09 PM
BLV	1000	92.87	Stock	-92870	USD	US	2020-03-19 12:42:01 PM
CLNE.O	-30000	1.34	Stock	40200	USD	US	2020-03-13 9:30:30 AM
FIVN.O	-300	63.4	Stock	19020	USD	US	2020-03-13 9:30:30 AM
MTB	150	102.1	Stock	-15315	USD	US	2020-03-13 9:30:05 AM
MTB	-150	102.1	Stock	15315	USD	US	2020-03-13 9:30:05 AM
SWN	10000	1.23	Stock	-12300	USD	US	2020-03-05 11:03:16 AM
UAN	20000	2	Stock	-40000	USD	US	2020-03-03 10:47:26 AM
CRC	10000	6.69	Stock	-66900	USD	US	2020-03-03 10:41:50 AM
NOA.TO	10000	11.94	Stock	-119400	CAD	CA	2020-03-03 10:41:32 AM
SWN	-10000	1.38	Stock	13800	USD	US	2020-03-03 10:36:08 AM
CLNE.O	10000	2.28	Stock	-22800	USD	US	2020-03-03 10:31:16 AM
CPSS.O	500	3.55	Stock	-1775	USD	US	2020-03-02 11:41:51 AM
MTB	100	165	Stock	-16500	USD	US	2020-02-24 9:34:16 AM
MTB	50	165	Stock	-8250	USD	US	2020-02-24 9:34:16 AM
CLNE.O	20000	2.75	Stock	-55000	USD	US	2020-02-24 9:30:25 AM
FIVN.O	100	72.5	Stock	-7250	USD	US	2020-02-21 2:17:42 PM
FIVN.O	200	75	Stock	-15000	USD	US	2020-02-21 10:09:36 AM
PVAC.O	300	18	Stock	-5400	USD	US	2020-02-14 1:09:44 PM
NOA.TO	500	14.1	Stock	-7050	CAD	CA	2020-02-04 10:00:27AM

Appendix 4. Chart analysis of benchmark

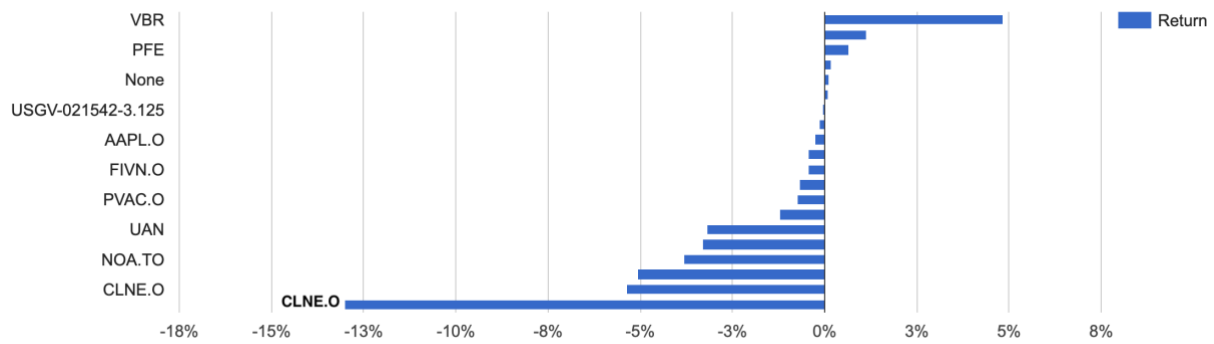


Appendix 5. Performance attribution by Country



The chart is retrieved on Mar.29th. There could be some small difference with the actual data on the end date Mar.20th.

Appendix 6. Performance attribution by Ticker



The chart is retrieved on Mar.29th. There could be some small difference with the actual data on the end date Mar.20th.

List of Trades

ticker	volume	price	type	subtype	net	Currency	timestamp	Reasons For Picking
AAPL.O	400	235	Stock		-94000	USD	2020-03-20 3:46:53 PM	Growth Momentum
AAPL.O	400	0.0139	Stock	Commission	-5.564	USD	2020-03-20 3:46:53 PM	
NOA.TO	-10500	8.45	Stock		88725	CAD	2020-03-20 12:19:27 PM	Value/Contrarian
NOA.TO	-10500	0.02	Stock	Commission	-210	CAD	2020-03-20 12:19:27 PM	
UAN	-20000	0.88	Stock		17600	USD	2020-03-20 9:30:28 AM	Value/Contrarian
UAN	-20000	0.007	Stock	Commission	-140.4	USD	2020-03-20 9:30:28 AM	
VBR	-1000	82.06	Stock		82060	USD	2020-03-19 4:50:02 PM	Small Cap Stock Index ETF
VBR	-1000	0.0138	Stock	Commission	-13.812	USD	2020-03-19 4:50:02 PM	
VBR	-1000	82.06	Stock		82060	USD	2020-03-19 4:50:02 PM	
VBR	-1000	0.0138	Stock	Commission	-13.812	USD	2020-03-19 4:50:02 PM	
USGV-021542-3.125	100	105.1099	Bond		-105109.9	USD	2020-03-19 12:56:57 PM	US Treasury Bond, Risk Hedging
USGV-021542-3.125	100	0.6908	Bond	Commission	-0.6908	USD	2020-03-19 12:56:57 PM	
AMZN.O	-50	1917.01	Stock		95850.5	USD	2020-03-19 12:53:55 PM	Growth, Momentum

AMZN.O	-50	0.0138	Stock	Commission	-0.6908	USD	2020-03-19 12:53:55 PM	
CRC	-10000	3.1	Stock		31000	USD	2020-03-19 12:46:09 PM	Value, small Cap
CRC	-10000	0.0138	Stock	Commission	-138.16	USD	2020-03-19 12:46:09 PM	
BLV	1000	92.87	Stock		-92870	USD	2020-03-19 12:42:01 PM	Value, Small Cap
BLV	1000	0.0138	Stock	Commission	-13.81	USD	2020-03-19 12:42:01 PM	
VBR	1000	0.3999	Stock	Dividend	399.9	USD	2020-03-13 5:02:11 PM	
CLNE.O	-30000	1.34	Stock		40200	USD	2020-03-13 9:30:30 AM	Value, Small Cap, Defensive stock
CLNE.O	-30000	0.0072	Stock	Commission	-216.6	USD	2020-03-13 9:30:30 AM	
FIVN.O	-300	63.4	Stock		19020	USD	2020-03-13 9:30:30 AM	Value, Small Cap
FIVN.O	-300	0.0144	Stock	Commission	-4.332	USD	2020-03-13 9:30:30 AM	
AMZN.O	50	1755	Stock		-87750	USD	2020-03-13 9:30:30 AM	
AMZN.O	50	0.0144	Stock	Commission	-0.722	USD	2020-03-13 9:30:30 AM	
MTB	150	102.1	Stock		-15315	USD	2020-03-13 9:30:05 AM	Momentum, Growth
MTB	150	0.0144	Stock	Commission	-2.166	USD	2020-03-13 9:30:05 AM	

HPQ	-6000	17.4	Stock		104400	USD	2020-03-13 9:30:05 AM	Contrarian, Special Situation Investing (Tender offer)
HPQ	-6000	0.0144	Stock	Commission	-86.64	USD	2020-03-13 9:30:05 AM	
MTB	-150	102.1	Stock		15315	USD	2020-03-13 9:30:05 AM	
MTB	-150	0.0144	Stock	Commission	-2.166	USD	2020-03-13 9:30:05 AM	
AAPL.O	400	264.89	Stock		-105956	USD	2020-03-13 9:30:05 AM	
AAPL.O	400	0.0144	Stock	Commission	-5.776	USD	2020-03-13 9:30:05 AM	
PFE	1000	30.48	Stock		-30480	USD	2020-03-13 9:30:05 AM	Momentum, Growth
PFE	1000	0.0144	Stock	Commission	-14.44	USD	2020-03-13 9:30:05 AM	
VBR	200	118	Stock		-23600	USD	2020-03-05 2:24:23 PM	
VBR	200	0.0149	Stock	Commission	-2.9776	USD	2020-03-05 2:24:23 PM	
SWN	10000	1.23	Stock		-12300	USD	2020-03-05 11:03:16 AM	Value, Small Cap, Defensive stock
SWN	10000	0.0075	Stock	Commission	-74.65	USD	2020-03-05 11:03:16 AM	
CSU.TO	-100	1400.63	Stock		140063	CAD	2020-03-05 10:43:42 AM	Growth, Momentum
CSU.TO	-100	0.02	Stock	Commission	-2	CAD	2020-03-05 10:43:42 AM	

HPQ	6000	21.32	Stock		-127920	USD	2020-03-03 10:53:15 AM	
HPQ	6000	0.015	Stock	Commission	-89.988	USD	2020-03-03 10:53:15 AM	
UAN	20000	2	Stock		-40000	USD	2020-03-03 10:47:26 AM	
UAN	20000	0.0075	Stock	Commission	-150.08	USD	2020-03-03 10:47:26 AM	
CRC	10000	6.69	Stock		-66900	USD	2020-03-03 10:41:50 AM	
CRC	10000	0.015	Stock	Commission	-150.16	USD	2020-03-03 10:41:50 AM	
NOA.TO	10000	11.94	Stock		-119400	CAD	2020-03-03 10:41:32 AM	
NOA.TO	10000	0.02	Stock	Commission	-200	CAD	2020-03-03 10:41:32 AM	
SWN	-10000	1.38	Stock		13800	USD	2020-03-03 10:36:08 AM	
SWN	-10000	0.0075	Stock	Commission	-74.99	USD	2020-03-03 10:36:08 AM	
CLNE.O	10000	2.28	Stock		-22800	USD	2020-03-03 10:31:16 AM	
CLNE.O	10000	0.015	Stock	Commission	-149.86	USD	2020-03-03 10:31:16 AM	
HIU.TO	-2000	23.28	Stock		46560	CAD	2020-03-03 10:26:02 AM	Contrarian
HIU.TO	-2000	0.02	Stock	Commission	-40	CAD	2020-03-03 10:26:02 AM	
CPSS.O	500	3.55	Stock		-1775	USD	2020-03-02 11:41:51 AM	Value, Small Cap

CPSS.O	500	0.015	Stock	Commission	-7.499	USD	2020-03-02 11:41:51 AM	
MTB	100	165	Stock		-16500	USD	2020-02-24 9:34:16 AM	
MTB	100	0.0151	Stock	Commission	-1.5062	USD	2020-02-24 9:34:16 AM	
MTB	50	165	Stock		-8250	USD	2020-02-24 9:34:16 AM	
MTB	50	0.0151	Stock	Commission	-0.7531	USD	2020-02-24 9:34:16 AM	
CLNE.O	20000	2.75	Stock		-55000	USD	2020-02-24 9:30:25 AM	
CLNE.O	20000	0.0151	Stock	Commission	-301.24	USD	2020-02-24 9:30:25 AM	
XSP.TO	500	36.5	Stock		-18250	CAD	2020-02-24 9:30:09 AM	Mandatory by Professor
XSP.TO	500	0.02	Stock	Commission	-10	CAD	2020-02-24 9:30:09 AM	
CSU.TO	100	1392.1	Stock		-139210	CAD	2020-02-24 9:30:05 AM	
CSU.TO	100	0.02	Stock	Commission	-2	CAD	2020-02-24 9:30:05 AM	
VBR	800	132.83	Stock		-106264	USD	2020-02-24 9:30:05 AM	
VBR	800	0.0151	Stock	Commission	-12.048	USD	2020-02-24 9:30:05 AM	
FIVN.O	100	72.5	Stock		-7250	USD	2020-02-21 2:17:42 PM	
FIVN.O	100	0.0151	Stock	Commission	-1.5144	USD	2020-02-21 2:17:42 PM	

FIVN.O	200	75	Stock		-15000	USD	2020-02-21 10:09:36 AM	
FIVN.O	200	0.0151	Stock	Commission	-3.0224	USD	2020-02-21 10:09:36 AM	
PVAC.O	300	18	Stock		-5400	USD	2020-02-14 1:09:44 PM	Value, Small Cap
PVAC.O	300	0.0151	Stock	Commission	-4.5288	USD	2020-02-14 1:09:44 PM	
NOA.TO	500	14.1	Stock		-7050	CAD	2020-02-04 10:00:27 AM	
NOA.TO	500	0.02	Stock	Commission	-10	CAD	2020-02-04 10:00:27 AM	

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