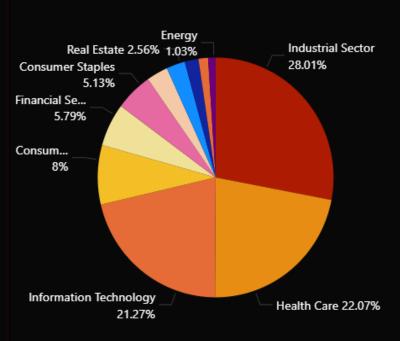




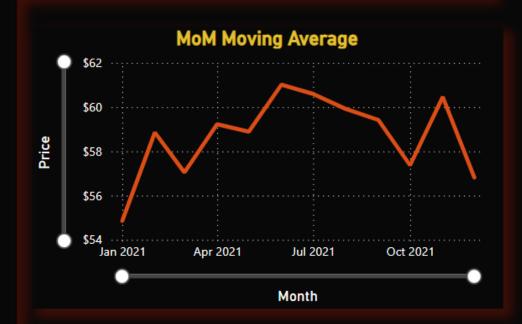
Current Price of Portfolio

Name	Last	High	Low	Volume •
MGYR	\$12.39	\$12.39	\$12.39	0
FUSB	\$10.56	\$10.56	\$10.56	100
JCTCF	\$8.63	\$8.90	\$8.63	3,800
CBFV	\$24.10	\$24.50	\$24.02	4,100
WINA	\$244.70	\$248.89	\$242.81	4,500

Value of Investment per sector









-19.32%

\$507.66K

Pot of Investment

\$409.58K

Current Pot Value

Top Gainers

Name	Top Gainers
DURECT Corporation	152.63%
ON Semiconductor Corporation	106.57%
PLBY Group, Inc.	149.39%
Soluna Holdings, Inc.	132.70%
Stagwell Inc.	145.71%

Top Losers

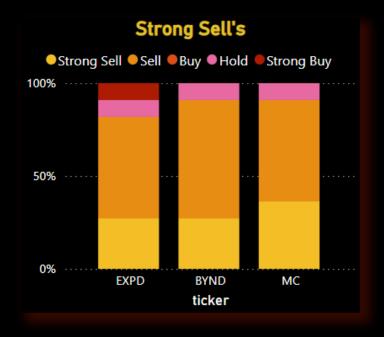
Name	Top Losers
Metacrine, Inc.	-94.56%
Spectrum Pharmaceuticals, Inc.	-88.60%
Cyclacel Pharmaceuticals, Inc.	-80.60%
ALX Oncology Holdings Inc.	-80.46%
Oil States International, Inc.	-75.42%

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Portfolio Analysis

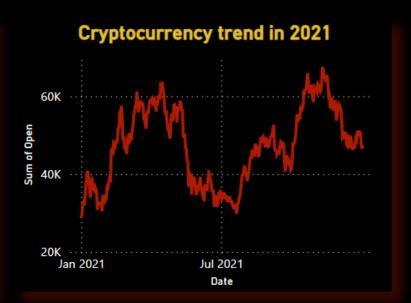












Code1: General Information

Code

```
finnhub_client = finnhub.Client(api_key="cf0ntpqad3i62koq2cb0cf0ntpqad3i62koq2cbg")
ticker=pd.read_csv('/Users/peterguo/Desktop/Bitcoin 1/output_next2.csv')
#1. General Information
# first 60
list1=[]
first=ticker.iloc[0:60,0] *
for a in first:
    list1.append(finnhub_client.company_profile2(symbol=a))
list1=pd.DataFrame(list1)
# generate excel
list1.to_excel('first.xlsx')
```

Result

	А	В	С	D	Е	F	G	Н	I	J	K	L	М	N	0	Р
1		country	currency	exchange	finnhubIndustry	ipo	logo	marketCapitalization	name	phone	shareOutstanding	ticker	weburl			
2	0	US	USD	NYSE MKT LLC	Energy	1981-05-22	https://stati	120.903516	Adams Resc	1713881360(2.4524	AE	http://www.	adamsresoui	rces.com/	
3	1	US	USD	NASDAQ NMS - GLOE	Health Care	2018-02-21	https://stati	2895.383648	Adapthealth	1610630635	134.732	AHCO	https://ada	othealth.com	/investor-rel	ations/
4	2	US	USD	NEW YORK STOCK EX	Financial Services	2014-04-10	https://stati	8066.453151	Ally Financia	18667104623	298.647	ALLY	https://www	v.ally.com/		



* Divided into two parts due to Finnhub limitations

Code2: Metrics

Code

Result

```
#2.Metrics
import json
ticker=pd.read_csv('/Users/peterguo/Desktop/Bitcoin 1/output_next2.csv')
list1=[]
first=ticker.iloc[0:60,0]
for a in first:
  list1.append(finnhub_client.company_basic_financials(symbol=a, metric=all))
b=list(range(60))
lista=∏
for c in b:
  lista.append(list1[c]['series']['annual'])
json_data=json.dumps(lista)
text = json.loads(json_data) *
list=pd.DataFrame(text)
list.to_excel('firstmetric.xlsx')
```

	Α	В	С	D	Е	F	G	Н		J	K
1		bookValue	cashRatio	currentRatio	ebitPerShare	eps	ev	fcfMargin	grossMargin	ermDebtTotal	rmDebtTotal(
2	0	[{'period': '2021-12-31', 'v': 160.386}, {'period': '2020-12-31', 'v': 149.092	[{'period': '2	([{'period': '20	[{'period': '20	[{'period': '2	[{'period': '2	([{'period': '2	([{'period': '2	[{'period': '2	([{'period': '2
3	1	[{'period': '2021-12-31', 'v': 2061.906}, {'period': '2020-12-31', 'v': 354.9},	[{'period': '2	[{'period': '20	[{'period': '20	[{'period': '2	[{'period': '2	([{'period': '2	([{'period': '2	[{'period': '2	([{'period': '2(
4	2	[{'period': '2021-12-31', 'v': 17050}, {'period': '2020-12-31', 'v': 14703}, {'period': '2020-12-31', 'v': 14705}, {'period': '2020-12-31', 'v': 1					[{'period': '2			[{'period': '2	([{'period': '2(

Highlight

* Used Json function for converting to dataframe

Code3: Period Price

Code

Result

	Α	В	С	D	Е	F	G	Н	1	J
1		level_0	level_1	open	high	low	close	adjclose	volume	ticker
2	0	AE	2021-01-04 00:00:00	24	24.3799992	23.25	23.8799992	22.4471779	10900	AE
3	1	AE	2021-01-05 00:00:00	24.2600002	24.2999992	23.1200008	23.6599998	22.2403831	19400	AE
4	2	AE	2021-01-06 00:00:00	24.8600006	24.8600006	23.0499992	23.4500008	22.0429821	17800	AE
	_									T.

Highlight

- 1. Used concat funcation combined dataframes
- 2. Added the serial number under column A

Code4: Market Capitalization

Code

```
#4. marketcapitalization
import yfinance as yf
ticker=pd.read_csv('/Users/peterguo/Desktop/Bitcoin 1/94 Tickers.csv')
mkticker=ticker["ticker"]
market_cap = {}
for aze in mkticker:
    stock = yf.Ticker(aze)
    data = yf.download(aze, start="2021-12-31", end="2022-01-01")
    closing_price = data.at['2021-12-31','Close']
    shares_outstanding = stock.info["sharesOutstanding"]
    market_cap[aze] = closing_price * shares_outstanding
market_cap = pd.DataFrame.from_dict(market_cap, orient='index', columns=['Market Capitalization'])
market_cap.to_excel('marketcapitalization for 94 tickers.xlsx')
```

Result

	A	В
1		Market Capitalization
2	AE	68201242. 69
3	AHCO	3295544597
4	ALLY	14218584233

Highlight

Calculated market capitalization

Alteryx for Data Cleaning

to the second second

Data cleaning for portfolio analysis by Soundarya, Valeriia, Vivek and Yifei **Data Preparation** Pivoting the orientation of data in "Name" column by moving vertical data fields onto a horizontal axis as We are using "actualPreviousClosePrice Input files from client joins to combine and "ActualDate" the data from these two input files Formatting and output conso file System_file.csv Exporting the values to excel sheet for better Selecting the visualisaton of required columns data Exporting the final output to excel Client_portfolio.xl **7** We select only Removing the null the required values of "Buy columns by We use unique in Quantity" and unchecking the order to omit the output next2.xlsx "Buy Price" boxes which are duplicates Query=Sheet1 not required Name buyPrice buyQuantity buyValuation current price Record ticker date 1 Pedevco Corp. PED 2.779999971 92 255,7599974 2021-12-30 1.03 2 Beyond Meat, Inc. BYND 21375,89944 2021-12-30 234,8999939 67.389999

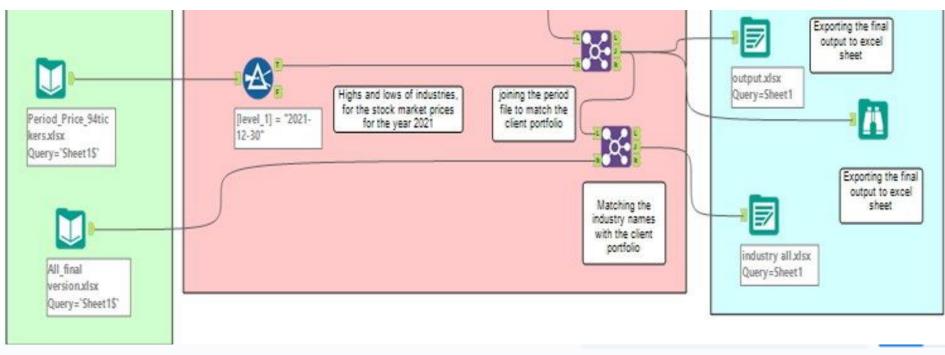
2225 422275

2024 42 22

704000000

CT C0000T

Alteryx for Data Cleaning



Record	Name	ticker	country	currency	exchange	industry
1	Pedevco Corp.	PED	US	USD	NYSE MKT LLC	Energy
2	Beyond Meat, Inc.	BYND	US	USD	NASDAQ NMS - GLOBAL MARKET	Food Products
-	man and the second	Env	115	HED	NEW YORK STOCK SYCHANGS INC	11111111



Most likely the given portfolio is Highly risky and short-term strategy

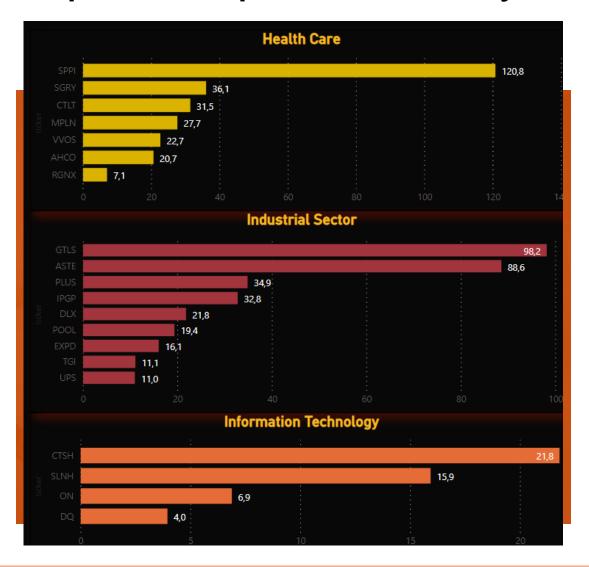
Consists of company shares only (no bonds, ETFs, currency, etc.)

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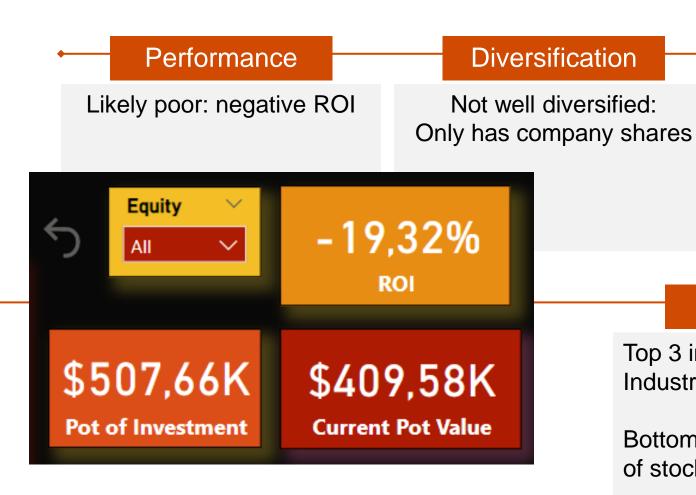
High volatility of stock

02

Top 5 companies to buy/sell from the portfolio.







When to sell entire portfolio?

- 1. Hits the portfolio value target
- 2. Decides to use money for something else
- 3. In case of unforeseen circumstances, such as a market crash.

Most/least valuable industry

Top 3 industries per total stock value in this portfolio are Industrial Sector, Healthcare, IT – 70,8% of stock together

Bottom 3 industries: Energy, Materials, Utilities – 4% of stock

How to optimize the portfolio investment?



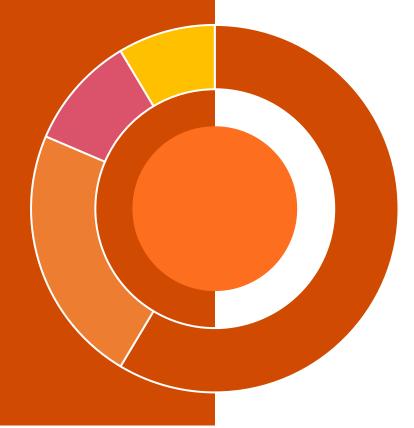


1. Sell extremely overvalued and undervalued stock

- 2. Diversify portfolio
- 1. Shares of funds, ETFs
- 2. Foreign currency
- 3. Bonds a safe alternative and other financial instruments

Split portfolio into parts:

% high-risk, % medium-risk, % low-risk.



Thank You Questions?