Data Gathering

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Libraries

```r
library(tidyverse)
library(lubridate)
library(quantmod)
library(getopt)
library(data.table)
library(xts)
library(timeSeries)
library(ggplot2)
library(zoo)

source('data_funcs.R')
```

Data Gathering

Data Import Options

```r
#opts_list <- get_options()
```

Checking Options

```r
#opts_list

#tick <- opts_list[1]
#st <- opts_list[2]
#en <- opts_list[3]

#check_opts(tick, st, en)
```

Importing Data

```r
tick = "AAPL"
st = "2020-01-01"
en = "2024-01-01"

series <- getSymbols(Symbols = tick, src='yahoo', auto.assign=FALSE, from=st, to=en)

daily_returns <- (dailyReturn(as.xts(series)))

divs <- data.frame(getDividends(Symbol = tick, src = 'yahoo', from = st, to = en)) %>%
  rownames_to_column("Dates") %>%
```

```r
  rename("Dividend" = 2)

stock_identity <- c(
  Ticker = tick,
  Start_Date = st,
  End_Date = en,
  div_yield_percentage = 0
)
```

Building Data Frame

Initializing Data

```r
daily_returns <- data.frame(dailyReturn(series)) %>%
  rownames_to_column("Dates") %>%
  mutate(Dates = ymd(Dates))

divs <- data.frame(divs) %>%
  group_by(year(Dates)) %>%
  summarise(Dividend = sum(Dividend)) %>%
  mutate(year =`year(Dates)`) %>%
  ungroup()

stock_df <- as.data.frame(series)

colnames(stock_df)[1] <- "Open"
colnames(stock_df)[2] <- "High"
colnames(stock_df)[3] <- "Low"
colnames(stock_df)[4] <- "Close"
colnames(stock_df)[5] <- "Volume"
colnames(stock_df)[6] <- "Adjusted"

stock_df <- stock_df %>%
  rownames_to_column("Dates") %>%
  mutate(Dates = ymd(Dates)) %>%
  left_join(daily_returns, by = join_by(Dates)) %>%
  mutate(year = year(Dates)) %>%
  left_join(divs, by = join_by(year == year)) %>%
  mutate(div_yield = Dividend / `Close`) %>%
  mutate(div_yield_percentage = div_yield * 100)

stock_identity$div_yield_percentage <- tail(stock_df$div_yield_percentage, 1)[[1]]
```

Data Processing

```r
stock_df <- stock_df %>%
  group_by(year(Dates)) %>%
  mutate(sd_returns = sd(daily.returns)) %>%
  mutate(volatility = sd_returns*sqrt(252)) %>%
  ungroup() %>%
  select(-'year(Dates)') %>%
  mutate(volatility_avg = mean(volatility))
```

Data Views

stock_df

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2020-01-02	74.0600	75.1500	73.7975	75.0875	135480400	72.87612	0.0138739	2020	0.8075	0.0107541	1.0754120	0.0293738	3.4662868	3.3196489
2020-01-03	74.2875	75.1450	74.1250	74.3575	146322800	72.16760	-0.0097220	2020	0.8075	0.0108597	1.0859698	0.0293738	3.4662868	3.3196489
2020-01-06	73.4475	74.9900	73.1875	74.9500	118387200	72.74263	0.0079682	2020	0.8075	0.0107738	1.0773850	0.0293738	3.4662868	3.3196489
2020-01-07	74.9600	75.2250	74.3700	74.5975	108872000	72.40054	-0.0047030	2020	0.8075	0.0108248	1.0824759	0.0293738	3.4662868	3.3196489
2020-01-08	74.2900	76.1100	74.2900	75.7975	132079200	73.56519	0.0160863	2020	0.8075	0.0106534	1.0653386	0.0293738	3.4662868	3.3196489
2020-01-09	76.8100	77.6075	76.5500	77.4075	170108400	75.12778	0.0212408	2020	0.8075	0.0104318	1.0431806	0.0293738	3.4662868	3.3196489
2020-01-10	77.6500	78.1675	77.0625	77.5825	140644800	75.29765	0.0022607	2020	0.8075	0.0104083	1.0408276	0.0293738	3.4662868	3.3196489
2020-01-13	77.9100	79.2675	77.7875	79.2400	121532000	76.90632	0.0213644	2020	0.8075	0.0101906	1.0190561	0.0293738	3.4662868	3.3196489
2020-01-14	79.1750	79.3925	78.0425	78.1700	161954400	75.86783	-0.0135033	2020	0.8075	0.0103301	1.0330050	0.0293738	3.4662868	3.3196489
2020-01-15	77.9625	78.8750	77.3875	77.8350	121923600	75.54270	-0.0042855	2020	0.8075	0.0103745	1.0374510	0.0293738	3.4662868	3.3196489
2020-01-16	78.3975	78.9250	78.0225	78.8100	108829200	76.48898	0.0125265	2020	0.8075	0.0102462	1.0246162	0.0293738	3.4662868	3.3196489
2020-01-17	79.0675	79.6850	78.7500	79.6825	137816400	77.33578	0.0110710	2020	0.8075	0.0101340	1.0133969	0.0293738	3.4662868	3.3196489
2020-01-21	79.2975	79.7550	79.0000	79.1425	110843200	76.81168	-0.0067769	2020	0.8075	0.0102031	1.0203114	0.0293738	3.4662868	3.3196489
2020-01-22	79.6450	79.9975	79.3275	79.4250	101832400	77.08588	0.0035695	2020	0.8075	0.0101668	1.0166824	0.0293738	3.4662868	3.3196489
2020-01-23	79.4800	79.8900	78.9125	79.8075	104472000	77.45709	0.0048159	2020	0.8075	0.0101181	1.0118096	0.0293738	3.4662868	3.3196489
2020-01-24	80.0625	80.8325	79.3800	79.5775	146537600	77.23387	-0.0028820	2020	0.8075	0.0101473	1.0147341	0.0293738	3.4662868	3.3196489
2020-01-27	77.5150	77.9425	76.2200	77.2375	161940000	74.96280	-0.0294053	2020	0.8075	0.0104548	1.0454766	0.0293738	3.4662868	3.3196489
2020-01-28	78.1500	79.6000	78.0475	79.4225	162234000	77.08344	0.0282893	2020	0.8075	0.0101671	1.0167144	0.0293738	3.4662868	3.3196489
2020-01-29	81.1125	81.9625	80.3450	81.0850	216229200	78.69697	0.0209323	2020	0.8075	0.0099587	0.9958685	0.0293738	3.4662868	3.3196489
2020-01-30	80.1350	81.0225	79.6875	80.9675	126743200	78.58295	-0.0014491	2020	0.8075	0.0099731	0.9973138	0.0293738	3.4662868	3.3196489
2020-01-31	80.2325	80.6700	77.0725	77.3775	199588400	75.09867	-0.0443387	2020	0.8075	0.0104358	1.0435850	0.0293738	3.4662868	3.3196489
2020-02-03	76.0750	78.3725	75.5550	77.1650	173788400	74.89243	-0.0027463	2020	0.8075	0.0104646	1.0464589	0.0293738	3.4662868	3.3196489
2020-02-04	78.8275	79.9100	78.4075	79.7125	136616400	77.36493	0.0330137	2020	0.8075	0.0101302	1.0130155	0.0293738	3.4662868	3.3196489
2020-02-05	80.8800	81.1900	79.7375	80.3625	118826800	77.99577	0.0081543	2020	0.8075	0.0100482	1.0048219	0.0293738	3.4662868	3.3196489
2020-02-06	80.6425	81.3050	80.0650	81.3025	105425600	78.90806	0.0116969	2020	0.8075	0.0099320	0.9932044	0.0293738	3.4662868	3.3196489
2020-02-07	80.5925	80.8500	79.5000	80.0075	117684000	77.83550	-0.0159281	2020	0.8075	0.0100928	1.0092804	0.0293738	3.4662868	3.3196489
2020-02-10	78.5450	80.3875	78.4625	80.3875	109348800	78.20517	0.0047495	2020	0.8075	0.0100451	1.0045094	0.0293738	3.4662868	3.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2020-02-11	80.9000	80.975	79.6775	79.9025	9432320	77.73336	-0.0060333	2020	0.8075	0.0101061	1.0106067	0.0293738	8.4662868	8.3196489
2020-02-12	80.3675	81.805	80.3675	81.8000	11373040	79.57932	0.0237478	2020	0.8075	0.0098716	0.9871638	0.0293738	8.4662868	8.3196489
2020-02-13	81.0475	81.555	80.8375	81.2175	9474760	79.01263	-0.0071211	2020	0.8075	0.0099424	0.9942439	0.0293738	8.4662868	8.3196489
2020-02-14	81.1850	81.495	80.7125	81.2375	8011360	79.03212	0.0002463	2020	0.8075	0.0099400	0.9939990	0.0293738	8.4662868	8.3196489
2020-02-18	78.8400	79.9375	78.6525	79.7500	15253120	77.58498	-0.0183105	2020	0.8075	0.0101254	1.0125392	0.0293738	8.4662868	8.3196489
2020-02-19	80.0000	81.1425	80.0000	80.9050	9398400	78.70861	0.0144827	2020	0.8075	0.0099808	0.9980842	0.0293738	8.4662868	8.3196489
2020-02-20	80.6575	81.1625	79.5525	80.0750	10056600	77.90116	-0.0102590	2020	0.8075	0.0100843	1.0084296	0.0293738	8.4662868	8.3196489
2020-02-21	79.6550	80.1125	77.6250	78.2625	12955400	76.13788	-0.0226350	2020	0.8075	0.0103178	1.0317841	0.0293738	8.4662868	8.3196489
2020-02-24	74.3150	76.045	72.3075	74.5450	22219520	72.52129	-0.0475004	2020	0.8075	0.0108324	1.0832383	0.0293738	8.4662868	8.3196489
2020-02-25	75.2375	75.6325	71.5325	72.0200	23067360	70.06486	-0.0338722	2020	0.8075	0.0112212	1.1212164	0.0293738	8.4662868	8.3196489
2020-02-26	71.6325	74.470	71.6250	73.1625	19805480	71.17632	0.0158637	2020	0.8075	0.0110371	1.1037075	0.0293738	8.4662868	8.3196489
2020-02-27	70.2750	71.500	68.2400	68.3800	32060560	66.52364	-0.0653682	2020	0.8075	0.0118090	1.1809009	0.0293738	8.4662868	8.3196489
2020-02-28	64.3150	69.6025	64.0925	68.3400	42651000	66.48472	-0.0005850	2020	0.8075	0.0118159	1.1815921	0.0293738	8.4662868	8.3196489
2020-03-02	70.5700	75.360	69.4300	74.7025	34139720	72.67452	0.0931007	2020	0.8075	0.0108095	1.0809545	0.0293738	8.4662868	8.3196489
2020-03-03	75.9175	76.000	71.4500	72.3300	31947560	70.36641	-0.0317593	2020	0.8075	0.0111641	1.1164109	0.0293738	8.4662868	8.3196489
2020-03-04	74.1100	75.850	73.2825	75.6850	21917840	73.63033	0.0463846	2020	0.8075	0.0106692	1.0669221	0.0293738	8.4662868	8.3196489
2020-03-05	73.8800	74.887	72.8525	73.2300	18757280	71.24199	-0.0324370	2020	0.8075	0.0110269	1.1026901	0.0293738	8.4662868	8.3196489
2020-03-06	70.5000	72.705	70.3075	72.2575	22617680	70.29590	-0.0132801	2020	0.8075	0.0111753	1.1175311	0.0293738	8.4662868	8.3196489
2020-03-09	65.9375	69.5225	65.7500	66.5425	28674480	64.73605	-0.0790921	2020	0.8075	0.0121351	1.2135101	0.0293738	8.4662868	8.3196489
2020-03-10	69.2850	71.6100	67.3425	71.3350	28529000	69.39845	0.0720216	2020	0.8075	0.0113198	1.1319829	0.0293738	8.4662868	8.3196489
2020-03-11	69.3475	70.3050	67.9650	68.8575	25559880	66.98819	-0.0347305	2020	0.8075	0.0117271	1.1727118	0.0293738	8.4662868	8.3196489
2020-03-12	63.9850	67.500	62.0000	62.0575	41847400	60.37280	-0.0987547	2020	0.8075	0.0130121	1.3012126	0.0293738	8.4662868	8.3196489
2020-03-13	66.2225	69.980	63.2375	69.4925	37073200	67.60596	0.1198083	2020	0.8075	0.0116200	1.1619959	0.0293738	8.4662868	8.3196489
2020-03-16	60.4875	64.770	60.0000	60.5525	32242360	58.90866	-0.1286470	2020	0.8075	0.0133355	1.3335535	0.0293738	8.4662868	8.3196489
2020-03-17	61.8775	64.4025	59.600	63.2150	32405600	60.49880	0.0439701	2020	0.8075	0.0127739	1.2773867	0.0293738	8.4662868	8.3196489
2020-03-18	59.9425	62.500	59.2800	61.6675	30023360	59.99338	-0.0244800	2020	0.8075	0.0130944	1.3094418	0.0293738	8.4662868	8.3196489
2020-03-19	61.8475	63.2100	60.6525	61.1950	27185720	59.53371	-0.0076621	2020	0.8075	0.0131955	1.3195523	0.0293738	8.4662868	8.3196489
2020-03-20	61.7950	62.9575	57.0000	57.3100	40169320	55.75418	-0.0634856	2020	0.8075	0.0140900	1.4090036	0.0293738	8.4662868	8.3196489
2020-03-23	57.0200	57.1250	53.1525	56.0925	33675280	54.56972	-0.0212442	2020	0.8075	0.0143959	1.4395864	0.0293738	8.4662868	8.3196489
2020-03-24	59.0900	61.9225	58.5750	61.7200	28753120	60.04446	0.1003254	2020	0.8075	0.0130833	1.3083279	0.0293738	8.4662868	8.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	sd_return	volatility	volatility_avg
2020-03-25	62.6875	64.5625	61.0750	61.3800	30360200	59.71370	-0.0055088	2020	0.8075	0.0131558	1.3155751	0.0293738	0.4662868	0.3196489
2020-03-26	61.6300	64.6700	61.5900	64.6100	25208720	62.85600	0.0526230	2020	0.8075	0.0124981	1.2498065	0.0293738	0.4662868	0.3196489
2020-03-27	63.1875	63.9675	61.7625	61.9350	20421680	60.25363	-0.0414022	2020	0.8075	0.0130379	1.3037862	0.0293738	0.4662868	0.3196489
2020-03-30	62.6850	63.8800	62.3500	63.7025	16797640	61.97314	0.0285380	2020	0.8075	0.0126761	1.2676112	0.0293738	0.4662868	0.3196489
2020-03-31	63.9000	65.6225	63.0000	63.5725	19700200	61.84668	-0.0020408	2020	0.8075	0.0127020	1.2702033	0.0293738	0.4662868	0.3196489
2020-04-01	61.6250	62.1800	59.7825	60.2275	17621840	58.59247	-0.0526171	2020	0.8075	0.0134075	1.3407496	0.0293738	0.4662868	0.3196489
2020-04-02	60.0850	61.2875	59.2250	61.2325	16593400	59.57018	0.0166867	2020	0.8075	0.0131874	1.3187442	0.0293738	0.4662868	0.3196489
2020-04-03	60.7000	61.4250	59.7425	60.3525	12988000	58.71408	-0.0143714	2020	0.8075	0.0133797	1.3379727	0.0293738	0.4662868	0.3196489
2020-04-06	62.7250	65.7775	62.3450	65.6175	20182040	63.83615	0.0872375	2020	0.8075	0.0123062	1.2306168	0.0293738	0.4662868	0.3196489
2020-04-07	67.7000	67.9250	64.7500	64.8575	20288720	63.09678	-0.0115823	2020	0.8075	0.0124504	1.2450372	0.0293738	0.4662868	0.3196489
2020-04-08	65.6850	66.8425	65.3075	66.5175	16889520	64.71172	0.0255946	2020	0.8075	0.0121397	1.2139662	0.0293738	0.4662868	0.3196489
2020-04-09	67.1750	67.5175	66.1750	66.9975	16183480	65.17870	0.0072161	2020	0.8075	0.0120527	1.2052689	0.0293738	0.4662868	0.3196489
2020-04-13	67.0775	68.4250	66.4575	68.3125	13102280	66.45799	0.0196276	2020	0.8075	0.0118207	1.1820677	0.0293738	0.4662868	0.3196489
2020-04-14	70.0000	72.0625	69.5125	71.7625	19499480	69.81431	0.0505032	2020	0.8075	0.0112524	1.1252396	0.0293738	0.4662868	0.3196489
2020-04-15	70.6000	71.5825	70.1575	71.1075	13115440	69.17710	-0.0091273	2020	0.8075	0.0113560	1.1356046	0.0293738	0.4662868	0.3196489
2020-04-16	71.8450	72.0500	70.5875	71.6725	15712520	69.72677	0.0079458	2020	0.8075	0.0112665	1.1266525	0.0293738	0.4662868	0.3196489
2020-04-17	71.1725	71.7375	69.2150	70.7000	21525000	68.78067	-0.0135687	2020	0.8075	0.0114215	1.1421500	0.0293738	0.4662868	0.3196489
2020-04-20	69.4875	70.4200	69.2125	69.2325	13001520	67.35302	-0.0207567	2020	0.8075	0.0116636	1.1663598	0.0293738	0.4662868	0.3196489
2020-04-21	69.0700	69.3125	66.3575	67.0925	18099160	65.27110	-0.0309103	2020	0.8075	0.0120356	1.2035623	0.0293738	0.4662868	0.3196489
2020-04-22	68.4025	69.4750	68.0500	69.0250	11686240	67.15115	0.0288036	2020	0.8075	0.0116987	1.1698660	0.0293738	0.4662868	0.3196489
2020-04-23	68.9675	70.4375	68.7175	68.7575	12481440	66.89092	-0.0038754	2020	0.8075	0.0117442	1.1744173	0.0293738	0.4662868	0.3196489
2020-04-24	69.3000	70.7525	69.2500	70.7425	12616120	68.82201	0.0288696	2020	0.8075	0.0114146	1.1414638	0.0293738	0.4662868	0.3196489
2020-04-27	70.4500	71.1350	69.9875	70.7925	11708760	68.87067	0.0007068	2020	0.8075	0.0114066	1.1406575	0.0293738	0.4662868	0.3196489
2020-04-28	71.2700	71.4575	69.5500	69.6450	11200480	67.75430	-0.0162094	2020	0.8075	0.0115945	1.1594516	0.0293738	0.4662868	0.3196489
2020-04-29	71.1825	72.4175	70.9725	71.9325	13728080	69.97973	0.0328452	2020	0.8075	0.0112258	1.1225802	0.0293738	0.4662868	0.3196489
2020-04-30	72.4900	73.6325	72.0875	73.4500	18306400	71.45600	0.0210961	2020	0.8075	0.0109939	1.0993874	0.0293738	0.4662868	0.3196489
2020-05-01	71.5625	74.7500	71.4625	72.2675	24061680	70.30561	-0.0160993	2020	0.8075	0.0111738	1.1173764	0.0293738	0.4662868	0.3196489
2020-05-04	72.2925	73.4225	71.5800	73.2900	13356800	71.30037	0.0141488	2020	0.8075	0.0110179	1.1017874	0.0293738	0.4662868	0.3196489
2020-05-05	73.7650	75.2500	73.6150	74.3900	14775120	72.37051	0.0150088	2020	0.8075	0.0108550	1.0854954	0.0293738	0.4662868	0.3196489
2020-05-06	75.1150	75.8100	74.7175	75.1575	14233360	73.11716	0.0103173	2020	0.8075	0.0107441	1.0744104	0.0293738	0.4662868	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	cumulative.return	volatility	volatility_avg
2020-05-07	75.8050	76.2925	75.4925	75.9350	115215273	73.8735	0.0103449	2020	0.8075	0.0106341	1.0634095	0.0293733	3.4662868	8.3196489
2020-05-08	76.4100	77.5875	76.0725	77.5325	133838407	75.6318	0.0210378	2020	0.8075	0.0104150	1.0414987	0.0293733	3.4662868	8.3196489
2020-05-11	77.0250	79.2625	76.8100	78.7525	145946400	76.8219	0.0157354	2020	0.8075	0.0102536	1.0253642	0.0293733	3.4662868	8.3196489
2020-05-12	79.4575	79.9225	77.7275	77.8525	162301200	75.94404	-0.0114282	2020	0.8075	0.0103722	1.0372178	0.0293733	3.4662868	8.3196489
2020-05-13	78.0375	78.9875	75.8025	76.9125	200622400	75.02706	-0.0120741	2020	0.8075	0.0104989	1.0498944	0.0293733	3.4662868	8.3196489
2020-05-14	76.1275	77.4475	75.3825	77.3850	158929200	75.48799	0.0061434	2020	0.8075	0.0104348	1.0434839	0.0293733	3.4662868	8.3196489
2020-05-15	75.0875	76.9750	75.0525	76.9275	166348400	75.04171	-0.0059121	2020	0.8075	0.0104969	1.0496897	0.0293733	3.4662868	8.3196489
2020-05-18	78.2925	79.1250	77.5800	78.7400	135178400	76.80976	0.0235611	2020	0.8075	0.0102553	1.0255271	0.0293733	3.4662868	8.3196489
2020-05-19	78.7575	79.6300	78.2525	78.2850	101729600	76.36592	-0.0057784	2020	0.8075	0.0103149	1.0314875	0.0293733	3.4662868	8.3196489
2020-05-20	79.1700	79.8800	79.1300	79.8075	111504800	77.85109	0.0194482	2020	0.8075	0.0101181	1.0118096	0.0293733	3.4662868	8.3196489
2020-05-21	79.6650	80.2225	78.9675	79.2125	102688800	77.27068	-0.0074555	2020	0.8075	0.0101941	1.0194098	0.0293733	3.4662868	8.3196489
2020-05-22	78.9425	79.8075	78.8375	79.7225	81803200	77.76820	0.0064384	2020	0.8075	0.0101289	1.0128884	0.0293733	3.4662868	8.3196489
2020-05-26	80.8750	81.0600	79.1250	79.1825	125522000	77.24143	-0.0067735	2020	0.8075	0.0101980	1.0197960	0.0293733	3.4662868	8.3196489
2020-05-27	79.0350	79.6775	78.2725	79.5275	112945200	77.57796	0.0043569	2020	0.8075	0.0101537	1.0153721	0.0293733	3.4662868	8.3196489
2020-05-28	79.1925	80.8600	78.9075	79.5625	133560800	77.61210	0.0004401	2020	0.8075	0.0101493	1.0149254	0.0293733	3.4662868	8.3196489
2020-05-29	79.8125	80.2875	79.1175	79.4850	153532400	77.53652	-0.0009741	2020	0.8075	0.0101591	1.0159149	0.0293733	3.4662868	8.3196489
2020-06-01	79.4375	80.5875	79.3025	80.4625	80791200	78.49040	0.0122979	2020	0.8075	0.0100357	1.0035731	0.0293733	3.4662868	8.3196489
2020-06-02	80.1875	80.8600	79.7325	80.8350	87642800	78.85342	0.0046295	2020	0.8075	0.0099895	0.9989485	0.0293733	3.4662868	8.3196489
2020-06-03	81.1650	81.5500	80.5750	81.2800	104491200	79.28750	0.0055050	2020	0.8075	0.0099348	0.9934793	0.0293733	3.4662868	8.3196489
2020-06-04	81.0975	81.4050	80.1950	80.5800	87560400	78.60468	-0.0086122	2020	0.8075	0.0100211	1.0021097	0.0293733	3.4662868	8.3196489
2020-06-05	80.8375	82.9375	80.8075	82.8750	137250400	80.84340	0.0284810	2020	0.8075	0.0097436	0.9743590	0.0293733	3.4662868	8.3196489
2020-06-08	82.5625	83.4000	81.8300	83.3650	95654400	81.32139	0.0059125	2020	0.8075	0.0096863	0.9686319	0.0293733	3.4662868	8.3196489
2020-06-09	83.0350	86.4025	83.0025	85.9975	147712400	83.88936	0.0315780	2020	0.8075	0.0093898	0.9389808	0.0293733	3.4662868	8.3196489
2020-06-10	86.9750	88.6925	86.5225	88.2100	166516800	86.04762	0.0257275	2020	0.8075	0.0091543	0.9154291	0.0293733	3.4662868	8.3196489
2020-06-11	87.3275	87.7650	83.8700	83.9750	201662400	81.91644	-0.0480104	2020	0.8075	0.0096160	0.9615957	0.0293733	3.4662868	8.3196489
2020-06-12	86.1800	86.9500	83.5550	84.7000	200146000	82.62366	0.0086335	2020	0.8075	0.0095336	0.9533649	0.0293733	3.4662868	8.3196489
2020-06-15	83.3125	86.4200	83.1450	85.7475	138808800	83.64549	0.0123672	2020	0.8075	0.0094172	0.9417184	0.0293733	3.4662868	8.3196489
2020-06-16	87.8650	88.3000	86.1800	88.0200	165428800	85.86228	0.0265022	2020	0.8075	0.0091741	0.9174052	0.0293733	3.4662868	8.3196489
2020-06-17	88.7875	88.8500	87.7725	87.8975	114406400	85.74280	-0.0013917	2020	0.8075	0.0091868	0.9186837	0.0293733	3.4662868	8.3196489
2020-06-18	87.8525	88.3625	87.3050	87.9325	96820400	85.77693	0.0003982	2020	0.8075	0.0091832	0.9183180	0.0293733	3.4662868	8.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2020-06-19	88.6600	89.1400	86.2875	87.4300	2644760	85.28674	-0.0057146	2020	0.8075	0.0092360	0.9235960	0.0293738	3.4662868	3.3196489
2020-06-22	87.8350	89.8650	87.7875	89.7175	1354452	87.51817	0.0261638	2020	0.8075	0.0090005	0.9000474	0.0293738	3.4662868	3.3196489
2020-06-23	91.0000	93.0950	90.5675	91.6325	2121556	89.38623	0.0213448	2020	0.8075	0.0088124	0.8812376	0.0293738	3.4662868	3.3196489
2020-06-24	91.2500	92.1975	89.6300	90.0150	1926232	87.80838	-0.0176520	2020	0.8075	0.0089707	0.8970727	0.0293738	3.4662868	3.3196489
2020-06-25	90.1750	91.2500	89.3925	91.2100	1375224	88.97408	0.0132756	2020	0.8075	0.0088532	0.8853196	0.0293738	3.4662868	3.3196489
2020-06-26	91.1025	91.3300	88.2550	88.4075	2052568	86.24028	-0.0307258	2020	0.8075	0.0091338	0.9133840	0.0293738	3.4662868	3.3196489
2020-06-29	88.3125	90.5425	87.8200	90.4450	1306460	88.27784	0.0230467	2020	0.8075	0.0089281	0.8928078	0.0293738	3.4662868	3.3196489
2020-06-30	90.0200	91.4950	90.0000	91.2000	1402232	88.96434	0.0083476	2020	0.8075	0.0088542	0.8854167	0.0293738	3.4662868	3.3196489
2020-07-01	91.2800	91.8400	90.9775	91.0275	1107372	88.79605	-0.0018915	2020	0.8075	0.0088709	0.8870946	0.0293738	3.4662868	3.3196489
2020-07-02	91.9625	92.6175	90.9100	91.0275	1140416	88.79605	0.0000000	2020	0.8075	0.0088709	0.8870946	0.0293738	3.4662868	3.3196489
2020-07-06	92.5000	93.9450	92.4675	93.4625	1186556	91.17136	0.0267502	2020	0.8075	0.0086398	0.8639829	0.0293738	3.4662868	3.3196489
2020-07-07	93.8525	94.6550	93.0575	93.1725	1124244	90.88847	-0.0031029	2020	0.8075	0.0086667	0.8666720	0.0293738	3.4662868	3.3196489
2020-07-08	94.1800	95.3750	94.0900	95.3425	1170920	93.00527	0.0232901	2020	0.8075	0.0084695	0.8469465	0.0293738	3.4662868	3.3196489
2020-07-09	96.2625	96.3175	94.6725	95.7525	1256428	93.40522	0.0043003	2020	0.8075	0.0084332	0.8433200	0.0293738	3.4662868	3.3196489
2020-07-10	95.3350	95.9800	94.7050	95.9200	902572	93.56864	0.0017493	2020	0.8075	0.0084185	0.8418474	0.0293738	3.4662868	3.3196489
2020-07-13	97.2650	99.9550	95.2575	95.4775	1916492	93.13699	-0.0046132	2020	0.8075	0.0084575	0.8457490	0.0293738	3.4662868	3.3196489
2020-07-14	94.8400	97.2550	93.8775	97.0575	1709892	94.67824	0.0165484	2020	0.8075	0.0083198	0.8319810	0.0293738	3.4662868	3.3196489
2020-07-15	98.9900	99.2475	96.4900	97.7250	1531980	95.32938	0.0068773	2020	0.8075	0.0082630	0.8262983	0.0293738	3.4662868	3.3196489
2020-07-16	96.5625	97.4050	95.9050	96.5225	1105776	94.15636	-0.0123049	2020	0.8075	0.0083659	0.8365925	0.0293738	3.4662868	3.3196489
2020-07-17	96.9875	97.1475	95.8400	96.3275	921868	93.96613	-0.0020203	2020	0.8075	0.0083829	0.8382861	0.0293738	3.4662868	3.3196489
2020-07-20	96.4175	98.5000	96.0625	98.3575	903180	95.94637	0.0210739	2020	0.8075	0.0082098	0.8209847	0.0293738	3.4662868	3.3196489
2020-07-21	99.1725	99.2500	96.7425	97.0000	1034332	94.62215	-0.0138017	2020	0.8075	0.0083247	0.8324742	0.0293738	3.4662868	3.3196489
2020-07-22	96.6925	97.9750	96.6025	97.2725	890016	94.88797	0.0028093	2020	0.8075	0.0083014	0.8301421	0.0293738	3.4662868	3.3196489
2020-07-23	96.9975	97.0775	92.0100	92.8450	1970044	90.56900	-0.0455164	2020	0.8075	0.0086973	0.8697291	0.0293738	3.4662868	3.3196489
2020-07-24	90.9875	92.9700	89.1450	92.6150	1854388	90.34463	-0.0024773	2020	0.8075	0.0087189	0.8718890	0.0293738	3.4662868	3.3196489
2020-07-27	93.7100	94.9050	93.4800	94.8100	1212140	92.48583	0.0237003	2020	0.8075	0.0085170	0.8517034	0.0293738	3.4662868	3.3196489
2020-07-28	94.3675	94.5500	93.2475	93.2525	1036256	90.96652	-0.0164275	2020	0.8075	0.0086593	0.8659285	0.0293738	3.4662868	3.3196489
2020-07-29	93.7500	95.2300	93.7125	95.0400	903292	92.71020	0.0191684	2020	0.8075	0.0084964	0.8496422	0.0293738	3.4662868	3.3196489
2020-07-30	94.1875	96.2975	93.7675	96.1900	1581300	93.83200	0.0121002	2020	0.8075	0.0083948	0.8394843	0.0293738	3.4662868	3.3196489
2020-07-31	102.8850	106.4150	100.8250	106.2600	3743368	103.65515	0.1046886	2020	0.8075	0.0075993	0.7599285	0.0293738	3.4662868	3.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return_volatility	volatility	volatility_avg
2020-08-03	108.2000	110.6375	107.8925	108.9375	30815120	106.2670	0.0251976	2020	0.8075	0.0074125	0.7412507	0.0293738	8.4662868	8.3196489
2020-08-04	109.1325	110.7900	108.3875	109.6650	17307160	106.9766	0.0066781	2020	0.8075	0.0073633	0.7363334	0.0293738	8.4662868	8.3196489
2020-08-05	109.3775	110.3925	108.8975	110.0625	12177680	107.3644	0.0036247	2020	0.8075	0.0073367	0.7336740	0.0293738	8.4662868	8.3196489
2020-08-06	110.4050	114.4125	109.7975	113.9025	20242880	111.1028	0.0348892	2020	0.8075	0.0070894	0.7089397	0.0293738	8.4662868	8.3196489
2020-08-07	113.2050	113.6750	110.2925	111.1125	59804560	108.5841	-0.0244946	2020	0.8075	0.0072674	0.7267409	0.0293738	8.4662868	8.3196489
2020-08-10	112.6000	113.7750	110.0000	112.7275	21240360	110.1623	-0.0145348	2020	0.8075	0.0071633	0.7163292	0.0293738	8.4662868	8.3196489
2020-08-11	111.9700	112.4825	109.1075	109.3750	18790240	106.8861	-0.0297399	2020	0.8075	0.0073829	0.7382857	0.0293738	8.4662868	8.3196489
2020-08-12	110.4975	113.2750	110.2975	113.0100	65598000	110.4384	0.0332343	2020	0.8075	0.0071454	0.7145385	0.0293738	8.4662868	8.3196489
2020-08-13	114.4300	116.0425	113.9275	115.0100	21008200	112.3929	0.0176975	2020	0.8075	0.0070211	0.7021128	0.0293738	8.4662868	8.3196489
2020-08-14	114.8300	115.0000	113.0450	114.9075	16556520	112.29277	-0.0008912	2020	0.8075	0.0070274	0.7027392	0.0293738	8.4662868	8.3196489
2020-08-17	116.0625	116.0875	113.9625	114.6075	11956160	111.99958	-0.0026108	2020	0.8075	0.0070458	0.7045787	0.0293738	8.4662868	8.3196489
2020-08-18	114.3525	116.0000	114.0075	115.5625	10563360	112.9328	0.0083328	2020	0.8075	0.0069876	0.6987561	0.0293738	8.4662868	8.3196489
2020-08-19	115.9825	117.1625	115.6100	115.7075	14553800	113.0745	-0.0012547	2020	0.8075	0.0069788	0.6978805	0.0293738	8.4662868	8.3196489
2020-08-20	115.7500	118.3925	115.7325	118.2750	26907200	115.5836	0.0221896	2020	0.8075	0.0068273	0.6827309	0.0293738	8.4662868	8.3196489
2020-08-21	119.2625	124.8675	119.2500	124.3700	33805480	121.5399	0.0515325	2020	0.8075	0.0064927	0.6492723	0.0293738	8.4662868	8.3196489
2020-08-24	128.6975	128.7850	123.9375	125.8575	34593760	122.9935	0.0119602	2020	0.8075	0.0064160	0.6415986	0.0293738	8.4662868	8.3196489
2020-08-25	124.6975	125.1800	123.0525	124.8250	21149560	121.98459	-0.0082037	2020	0.8075	0.0064691	0.6469057	0.0293738	8.4662868	8.3196489
2020-08-26	126.1800	126.9925	125.0825	126.5225	16302240	123.6434	0.0135991	2020	0.8075	0.0063823	0.6382264	0.0293738	8.4662868	8.3196489
2020-08-27	127.1425	127.4850	123.8325	125.0100	15555240	122.16540	-0.0119544	2020	0.8075	0.0064595	0.6459483	0.0293738	8.4662868	8.3196489
2020-08-28	126.0125	126.4425	124.5775	124.8075	18763000	121.96748	-0.0016199	2020	0.8075	0.0064700	0.6469964	0.0293738	8.4662868	8.3196489
2020-08-31	127.5800	131.0000	126.0000	129.0400	22570270	126.1036	0.0339121	2020	0.8075	0.0062577	0.6257750	0.0293738	8.4662868	8.3196489
2020-09-01	132.7600	134.8000	130.5300	134.1800	51948100	131.1267	0.0398326	2020	0.8075	0.0060180	0.6018036	0.0293738	8.4662868	8.3196489
2020-09-02	137.5900	137.9800	127.0000	131.4000	200119000	128.40994	-0.0207184	2020	0.8075	0.0061454	0.6145358	0.0293738	8.4662868	8.3196489
2020-09-03	126.9100	128.8400	120.5000	120.8800	257599600	118.12935	-0.0800609	2020	0.8075	0.0066802	0.6680179	0.0293738	8.4662868	8.3196489
2020-09-04	120.0700	123.7000	110.8900	120.9600	332607200	118.2075	0.0006618	2020	0.8075	0.0066758	0.6675761	0.0293738	8.4662868	8.3196489
2020-09-08	113.9500	118.9900	112.6800	112.8200	231366000	110.25277	-0.0672950	2020	0.8075	0.0071574	0.7157419	0.0293738	8.4662868	8.3196489
2020-09-09	117.2600	119.1400	115.2600	117.3200	176940500	114.65036	0.0398865	2020	0.8075	0.0068829	0.6882884	0.0293738	8.4662868	8.3196489
2020-09-10	120.3600	120.5000	112.5000	113.4900	182274400	110.90751	-0.0326458	2020	0.8075	0.0071152	0.7115164	0.0293738	8.4662868	8.3196489
2020-09-11	114.5700	115.2300	110.0000	112.0000	180860300	109.45142	-0.0131289	2020	0.8075	0.0072098	0.7209821	0.0293738	8.4662868	8.3196489
2020-09-14	114.7200	115.9300	112.8000	115.3600	140150100	112.73495	0.0300000	2020	0.8075	0.0069998	0.6999827	0.0293738	8.4662868	8.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	scaled_return	volatility	volatility_avg
2020-09-15	118.330	118.830	113.610	115.540	84642000	112.91086	0.0015603	2020	0.8075	0.0069889	0.6988922	0.0293738	8.4662868	8.3196489
2020-09-16	115.230	116.000	112.040	112.130	54679000	109.57846	-0.0295136	2020	0.8075	0.0072015	0.7201463	0.0293738	8.4662868	8.3196489
2020-09-17	109.720	112.200	108.710	110.340	78011000	107.82919	-0.0159636	2020	0.8075	0.0073183	0.7318289	0.0293738	8.4662868	8.3196489
2020-09-18	110.400	110.880	106.090	106.840	287104900	104.40884	-0.0317201	2020	0.8075	0.0075580	0.7558031	0.0293738	8.4662868	8.3196489
2020-09-21	104.540	110.190	103.100	110.080	95713800	107.57512	0.0303258	2020	0.8075	0.0073356	0.7335574	0.0293738	8.4662868	8.3196489
2020-09-22	112.680	112.860	109.160	111.810	83055400	109.26574	0.0157158	2020	0.8075	0.0072221	0.7222073	0.0293738	8.4662868	8.3196489
2020-09-23	111.620	112.110	106.770	107.120	50718700	104.68248	-0.0419461	2020	0.8075	0.0075383	0.7538275	0.0293738	8.4662868	8.3196489
2020-09-24	105.170	110.250	105.000	108.220	67743300	105.75745	0.0102688	2020	0.8075	0.0074617	0.7461652	0.0293738	8.4662868	8.3196489
2020-09-25	108.430	112.440	107.670	112.280	49981400	109.72500	0.0375161	2020	0.8075	0.0071918	0.7191842	0.0293738	8.4662868	8.3196489
2020-09-28	115.010	115.320	112.780	114.960	137672400	112.34407	0.0238689	2020	0.8075	0.0070242	0.7024182	0.0293738	8.4662868	8.3196489
2020-09-29	114.550	115.310	113.570	114.090	99382200	111.49387	-0.0075679	2020	0.8075	0.0070777	0.7077746	0.0293738	8.4662868	8.3196489
2020-09-30	113.790	117.260	113.620	115.810	142675200	113.17472	0.0150758	2020	0.8075	0.0069726	0.6972628	0.0293738	8.4662868	8.3196489
2020-10-01	117.640	117.720	115.830	116.790	116120400	114.13244	0.0084622	2020	0.8075	0.0069141	0.6914119	0.0293738	8.4662868	8.3196489
2020-10-02	112.890	115.370	112.220	113.020	144712000	110.44821	-0.0322802	2020	0.8075	0.0071448	0.7144753	0.0293738	8.4662868	8.3196489
2020-10-05	113.910	116.650	113.550	116.500	106243800	113.84902	0.0307910	2020	0.8075	0.0069313	0.6931330	0.0293738	8.4662868	8.3196489
2020-10-06	115.700	116.120	112.250	113.160	161498200	110.58503	-0.0286695	2020	0.8075	0.0071359	0.7135914	0.0293738	8.4662868	8.3196489
2020-10-07	114.620	115.550	114.130	115.080	96849000	112.46134	0.0169671	2020	0.8075	0.0070169	0.7016858	0.0293738	8.4662868	8.3196489
2020-10-08	116.250	116.400	114.590	114.970	83477200	112.35385	-0.0009559	2020	0.8075	0.0070236	0.7023571	0.0293738	8.4662868	8.3196489
2020-10-09	115.280	117.000	114.920	116.970	100506900	114.30833	0.0173958	2020	0.8075	0.0069035	0.6903479	0.0293738	8.4662868	8.3196489
2020-10-12	120.060	125.180	119.280	124.400	240226800	121.56927	0.0635206	2020	0.8075	0.0064912	0.6491157	0.0293738	8.4662868	8.3196489
2020-10-13	125.270	125.390	119.650	121.100	262330500	118.34435	-0.0265274	2020	0.8075	0.0066680	0.6668043	0.0293738	8.4662868	8.3196489
2020-10-14	121.000	123.030	119.620	121.190	150712000	118.43231	0.0007432	2020	0.8075	0.0066631	0.6663091	0.0293738	8.4662868	8.3196489
2020-10-15	118.720	121.200	118.150	120.710	112559200	117.96323	-0.0039608	2020	0.8075	0.0066896	0.6689587	0.0293738	8.4662868	8.3196489
2020-10-16	121.280	121.550	118.810	119.020	115393800	116.31170	-0.0140005	2020	0.8075	0.0067846	0.6784574	0.0293738	8.4662868	8.3196489
2020-10-19	119.960	120.420	115.660	115.980	120639300	113.34085	-0.0255419	2020	0.8075	0.0069624	0.6962407	0.0293738	8.4662868	8.3196489
2020-10-20	116.200	118.980	115.630	117.510	124423700	114.83603	0.0131919	2020	0.8075	0.0068718	0.6871755	0.0293738	8.4662868	8.3196489
2020-10-21	116.670	118.710	116.450	116.870	89946000	114.21062	-0.0054463	2020	0.8075	0.0069094	0.6909386	0.0293738	8.4662868	8.3196489
2020-10-22	117.450	118.040	114.590	115.750	101988000	113.11610	-0.0095833	2020	0.8075	0.0069762	0.6976242	0.0293738	8.4662868	8.3196489
2020-10-23	116.390	116.550	114.280	115.040	82572600	112.42225	-0.0061339	2020	0.8075	0.0070193	0.7019298	0.0293738	8.4662868	8.3196489
2020-10-26	114.010	116.550	112.880	115.050	111850700	112.43203	0.0000869	2020	0.8075	0.0070187	0.7018687	0.0293738	8.4662868	8.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	sentiment_return	volatility	volatility_avg
2020-10-27	115.490	117.280	114.540	116.600	92276800	13.9467	0.0134724	2020	0.8075	0.0069254	0.6925386	0.0293738	0.4662868	0.3196489
2020-10-28	115.050	115.430	111.100	111.200	143937800	8.66962	-0.0463122	2020	0.8075	0.0072617	0.7261691	0.0293738	0.4662868	0.3196489
2020-10-29	112.370	116.930	112.200	115.320	46129200	12.69586	0.0370504	2020	0.8075	0.0070023	0.7002255	0.0293738	0.4662868	0.3196489
2020-10-30	111.060	111.990	107.720	108.600	90272600	6.38287	-0.0560180	2020	0.8075	0.0074178	0.7417784	0.0293738	0.4662868	0.3196489
2020-11-02	109.110	110.680	107.320	108.770	22866900	6.29492	-0.0008268	2020	0.8075	0.0074239	0.7423922	0.0293738	0.4662868	0.3196489
2020-11-03	109.660	111.490	108.730	110.440	76244000	7.92692	0.0153536	2020	0.8075	0.0073117	0.7311662	0.0293738	0.4662868	0.3196489
2020-11-04	114.140	115.590	112.350	114.950	38235500	12.33433	0.0408366	2020	0.8075	0.0070248	0.7024794	0.0293738	0.4662868	0.3196489
2020-11-05	117.950	119.620	116.870	119.030	26387100	16.32147	0.0354937	2020	0.8075	0.0067840	0.6784004	0.0293738	0.4662868	0.3196489
2020-11-06	118.320	119.200	116.130	118.690	14457900	16.18930	-0.0028564	2020	0.8075	0.0068034	0.6803437	0.0293738	0.4662868	0.3196489
2020-11-09	120.500	121.990	116.050	116.320	54515300	13.86925	-0.0199680	2020	0.8075	0.0069421	0.6942056	0.0293738	0.4662868	0.3196489
2020-11-10	115.550	117.590	114.130	115.970	38023400	13.52661	-0.0030089	2020	0.8075	0.0069630	0.6963008	0.0293738	0.4662868	0.3196489
2020-11-11	117.190	119.630	116.440	119.490	12295000	16.97244	0.0303526	2020	0.8075	0.0067579	0.6757888	0.0293738	0.4662868	0.3196489
2020-11-12	119.620	120.530	118.570	119.210	3162300	16.69833	-0.0023433	2020	0.8075	0.0067738	0.6773761	0.0293738	0.4662868	0.3196489
2020-11-13	119.440	119.670	117.870	119.260	81581900	16.74730	0.0004195	2020	0.8075	0.0067709	0.6770921	0.0293738	0.4662868	0.3196489
2020-11-16	118.920	120.990	118.150	120.300	91183000	17.76539	0.0087205	2020	0.8075	0.0067124	0.6712386	0.0293738	0.4662868	0.3196489
2020-11-17	119.550	120.670	118.960	119.390	74271000	16.87457	-0.0075645	2020	0.8075	0.0067635	0.6763548	0.0293738	0.4662868	0.3196489
2020-11-18	118.610	119.820	118.000	118.030	76322100	15.54320	-0.0113912	2020	0.8075	0.0068415	0.6841481	0.0293738	0.4662868	0.3196489
2020-11-19	117.590	119.060	116.810	118.640	74113000	16.14034	0.0051682	2020	0.8075	0.0068063	0.6806305	0.0293738	0.4662868	0.3196489
2020-11-20	118.640	118.770	117.290	117.340	73604300	14.86775	-0.0109575	2020	0.8075	0.0068817	0.6881711	0.0293738	0.4662868	0.3196489
2020-11-23	117.180	117.620	113.750	113.850	27959300	11.45126	-0.0297426	2020	0.8075	0.0070927	0.7092666	0.0293738	0.4662868	0.3196489
2020-11-24	113.910	115.850	112.590	115.170	13874200	12.74348	0.0115942	2020	0.8075	0.0070114	0.7011375	0.0293738	0.4662868	0.3196489
2020-11-25	115.550	116.750	115.170	116.030	76499200	13.58536	0.0074672	2020	0.8075	0.0069594	0.6959407	0.0293738	0.4662868	0.3196489
2020-11-27	116.570	117.490	116.220	116.590	46691300	14.13353	0.0048263	2020	0.8075	0.0069260	0.6925980	0.0293738	0.4662868	0.3196489
2020-11-30	116.970	120.970	116.810	119.050	69410200	16.54171	0.0210996	2020	0.8075	0.0067829	0.6782864	0.0293738	0.4662868	0.3196489
2020-12-01	121.010	123.470	120.010	122.720	27728200	20.13438	0.0308274	2020	0.8075	0.0065800	0.6580019	0.0293738	0.4662868	0.3196489
2020-12-02	122.020	123.370	120.890	123.080	89004200	20.48681	0.0029335	2020	0.8075	0.0065608	0.6560773	0.0293738	0.4662868	0.3196489
2020-12-03	123.520	123.780	122.210	122.940	78967600	20.34975	-0.0011375	2020	0.8075	0.0065682	0.6568245	0.0293738	0.4662868	0.3196489
2020-12-04	122.600	122.860	121.520	122.250	78260400	19.67430	-0.0056125	2020	0.8075	0.0066053	0.6605317	0.0293738	0.4662868	0.3196489
2020-12-07	122.310	124.570	122.250	123.750	86712000	21.14269	0.0122699	2020	0.8075	0.0065253	0.6525253	0.0293738	0.4662868	0.3196489
2020-12-08	124.370	124.980	123.090	124.380	82225500	21.75941	0.0050909	2020	0.8075	0.0064922	0.6492201	0.0293738	0.4662868	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2020-12-09	124.5300	125.9500	121.0000	121.7800	15089200	119.21419	-0.0209037	2020	0.8075	0.0066308	0.6630810	0.0293738	0.4662868	0.3196489
2020-12-10	120.5000	123.8700	120.1500	123.2408	8131220	120.64342	0.0119888	2020	0.8075	0.0065523	0.6552256	0.0293738	0.4662868	0.3196489
2020-12-11	122.4300	122.7600	120.5500	122.4108	8693980	119.83093	-0.0067348	2020	0.8075	0.0065967	0.6596683	0.0293738	0.4662868	0.3196489
2020-12-14	122.6000	123.3500	121.5400	121.7800	7918450	119.21419	-0.0051467	2020	0.8075	0.0066308	0.6630810	0.0293738	0.4662868	0.3196489
2020-12-15	124.3400	127.9000	124.1300	127.8800	5724370	125.18567	0.0500903	2020	0.8075	0.0063145	0.6314514	0.0293738	0.4662868	0.3196489
2020-12-16	127.4100	128.3700	126.5600	127.8100	9820860	125.11714	-0.0005474	2020	0.8075	0.0063180	0.6317972	0.0293738	0.4662868	0.3196489
2020-12-17	128.9000	129.5800	128.0400	128.7000	9435980	125.98840	0.0069635	2020	0.8075	0.0062743	0.6274281	0.0293738	0.4662868	0.3196489
2020-12-18	128.9600	129.1000	126.1200	126.6600	9254150	123.99139	-0.0158508	2020	0.8075	0.0063753	0.6375335	0.0293738	0.4662868	0.3196489
2020-12-21	125.0200	128.3100	123.4500	128.2300	21251600	125.52830	0.0123953	2020	0.8075	0.0062973	0.6297279	0.0293738	0.4662868	0.3196489
2020-12-22	131.6100	134.4100	129.6500	131.8800	6890480	129.10141	0.0284646	2020	0.8075	0.0061230	0.6122990	0.0293738	0.4662868	0.3196489
2020-12-23	132.1600	132.4300	130.7800	130.9600	8822370	128.20078	-0.0069760	2020	0.8075	0.0061660	0.6166005	0.0293738	0.4662868	0.3196489
2020-12-24	131.3200	133.4600	131.1000	131.9700	5493010	129.18950	0.0077122	2020	0.8075	0.0061188	0.6118815	0.0293738	0.4662868	0.3196489
2020-12-28	133.9900	137.3400	133.5100	136.6900	24486200	133.81003	0.0357657	2020	0.8075	0.0059075	0.5907528	0.0293738	0.4662868	0.3196489
2020-12-29	138.0500	138.7900	134.3400	134.8700	21047300	132.02841	-0.0133149	2020	0.8075	0.0059872	0.5987247	0.0293738	0.4662868	0.3196489
2020-12-30	135.5800	135.9900	133.4000	133.7200	9645210	130.90263	-0.0085267	2020	0.8075	0.0060387	0.6038738	0.0293738	0.4662868	0.3196489
2020-12-31	134.0800	134.7400	131.7200	132.6900	9911660	129.89430	-0.0077027	2020	0.8075	0.0060856	0.6085613	0.0293738	0.4662868	0.3196489
2021-01-04	133.5200	133.6100	126.7600	129.4100	43301900	126.68344	-0.0247193	2021	0.8650	0.0066842	0.6684182	0.0158158	0.2510596	0.3196489
2021-01-05	128.8900	131.7400	128.4300	131.0100	9766490	128.24974	0.0123637	2021	0.8650	0.0066025	0.6602550	0.0158158	0.2510596	0.3196489
2021-01-06	127.7200	131.0500	126.3800	126.6000	5508800	123.93262	-0.0336615	2021	0.8650	0.0068325	0.6832544	0.0158158	0.2510596	0.3196489
2021-01-07	128.3600	131.6300	127.8600	130.9200	9578200	128.16161	0.0341232	2021	0.8650	0.0066071	0.6607088	0.0158158	0.2510596	0.3196489
2021-01-08	132.4300	132.6300	130.2300	132.0500	5158200	129.26784	0.0086313	2021	0.8650	0.0065505	0.6550549	0.0158158	0.2510596	0.3196489
2021-01-11	129.1900	130.1700	128.5000	128.9800	384500	126.26249	-0.0232488	2021	0.8650	0.0067065	0.6706466	0.0158158	0.2510596	0.3196489
2021-01-12	128.5000	129.6900	126.8600	128.8000	9195110	126.08628	-0.0013955	2021	0.8650	0.0067158	0.6715838	0.0158158	0.2510596	0.3196489
2021-01-13	128.7600	131.4500	128.4900	130.8900	8863680	128.13225	0.0162267	2021	0.8650	0.0066086	0.6608603	0.0158158	0.2510596	0.3196489
2021-01-14	130.8000	131.0000	128.7600	128.9100	9022180	126.19397	-0.0151272	2021	0.8650	0.0067101	0.6710108	0.0158158	0.2510596	0.3196489
2021-01-15	128.7800	130.2200	127.0000	127.1400	11598500	124.46126	-0.0137305	2021	0.8650	0.0068035	0.6803524	0.0158158	0.2510596	0.3196489
2021-01-19	127.7800	128.7100	126.9400	127.8300	9075730	125.13673	0.0054271	2021	0.8650	0.0067668	0.6766800	0.0158158	0.2510596	0.3196489
2021-01-20	128.6600	132.4900	128.5500	132.0300	43195000	129.24823	0.0328561	2021	0.8650	0.0065515	0.6551541	0.0158158	0.2510596	0.3196489
2021-01-21	133.8000	139.6700	133.5900	136.8700	20150900	133.98624	0.0366583	2021	0.8650	0.0063199	0.6319866	0.0158158	0.2510596	0.3196489
2021-01-22	136.2800	139.8500	135.0200	139.0700	14459400	136.13994	0.0160737	2021	0.8650	0.0062199	0.6219889	0.0158158	0.2510596	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	sentiment_return	volatility	volatility_avg
2021-01-25	143.070	145.090	136.540	142.920	157611700	139.9088	0.0276838	2021	0.8650	0.0060523	0.6052337	0.0158158	0.2510590	0.3196489
2021-01-26	143.600	144.300	141.370	143.160	98390600	140.1437	0.0016793	2021	0.8650	0.0060422	0.6042190	0.0158158	0.2510590	0.3196489
2021-01-27	143.430	144.300	140.410	142.060	140843800	139.06691	-0.0076838	2021	0.8650	0.0060890	0.6088977	0.0158158	0.2510590	0.3196489
2021-01-28	139.520	141.990	136.700	137.090	142621100	134.20164	-0.0349852	2021	0.8650	0.0063097	0.6309724	0.0158158	0.2510590	0.3196489
2021-01-29	135.830	136.740	130.210	131.960	177523800	129.17973	-0.0374206	2021	0.8650	0.0065550	0.6555016	0.0158158	0.2510590	0.3196489
2021-02-01	133.750	135.380	130.930	134.140	106239800	131.31383	0.0165201	2021	0.8650	0.0064485	0.6448487	0.0158158	0.2510590	0.3196489
2021-02-02	135.730	136.310	134.610	134.990	83305400	132.14584	0.0063367	2021	0.8650	0.0064079	0.6407882	0.0158158	0.2510590	0.3196489
2021-02-03	135.760	135.770	133.610	133.940	89880900	131.11800	-0.0077784	2021	0.8650	0.0064581	0.6458115	0.0158158	0.2510590	0.3196489
2021-02-04	136.300	137.400	134.590	137.390	84183100	134.49533	0.0257578	2021	0.8650	0.0062959	0.6295946	0.0158158	0.2510590	0.3196489
2021-02-05	137.350	137.420	135.860	136.760	75693800	134.07863	-0.0045855	2021	0.8650	0.0063249	0.6324949	0.0158158	0.2510590	0.3196489
2021-02-08	136.030	136.960	134.920	136.910	71297200	134.22569	0.0010969	2021	0.8650	0.0063180	0.6318019	0.0158158	0.2510590	0.3196489
2021-02-09	136.620	137.880	135.850	136.010	76774200	133.34334	-0.0065737	2021	0.8650	0.0063598	0.6359827	0.0158158	0.2510590	0.3196489
2021-02-10	136.480	136.990	134.400	135.390	73046600	132.73549	-0.0045585	2021	0.8650	0.0063890	0.6388950	0.0158158	0.2510590	0.3196489
2021-02-11	135.900	136.390	133.770	135.130	64280000	132.48061	-0.0019203	2021	0.8650	0.0064012	0.6401243	0.0158158	0.2510590	0.3196489
2021-02-12	134.350	135.530	133.690	135.370	60145100	132.71590	0.0017760	2021	0.8650	0.0063899	0.6389895	0.0158158	0.2510590	0.3196489
2021-02-16	135.490	136.010	132.790	133.190	80576300	130.57863	-0.0161040	2021	0.8650	0.0064945	0.6494481	0.0158158	0.2510590	0.3196489
2021-02-17	131.250	132.220	129.470	130.840	97918500	128.27470	-0.0176440	2021	0.8650	0.0066111	0.6611128	0.0158158	0.2510590	0.3196489
2021-02-18	129.200	130.000	127.410	129.710	96856700	127.16689	-0.0086364	2021	0.8650	0.0066687	0.6668722	0.0158158	0.2510590	0.3196489
2021-02-19	130.240	130.710	128.800	129.870	87668800	127.32373	0.0012334	2021	0.8650	0.0066605	0.6660507	0.0158158	0.2510590	0.3196489
2021-02-22	128.010	129.720	125.600	126.000	103916400	123.52960	-0.0297990	2021	0.8650	0.0068651	0.6865079	0.0158158	0.2510590	0.3196489
2021-02-23	123.760	126.710	118.390	125.860	58273000	123.39234	-0.0011111	2021	0.8650	0.0068727	0.6872716	0.0158158	0.2510590	0.3196489
2021-02-24	124.940	125.560	122.230	125.350	111039900	122.89235	-0.0040521	2021	0.8650	0.0069007	0.6900678	0.0158158	0.2510590	0.3196489
2021-02-25	124.680	126.460	120.540	120.990	48199500	118.61782	-0.0347826	2021	0.8650	0.0071494	0.7149351	0.0158158	0.2510590	0.3196489
2021-02-26	122.590	124.850	121.200	121.260	64560400	118.88253	0.0022316	2021	0.8650	0.0071334	0.7133432	0.0158158	0.2510590	0.3196489
2021-03-01	123.750	127.930	122.790	127.790	116307900	125.28452	0.0538512	2021	0.8650	0.0067689	0.6768918	0.0158158	0.2510590	0.3196489
2021-03-02	128.410	128.720	125.010	125.120	102260900	122.66685	-0.0208936	2021	0.8650	0.0069134	0.6913363	0.0158158	0.2510590	0.3196489
2021-03-03	124.810	125.710	121.840	122.060	112966300	119.66684	-0.0244566	2021	0.8650	0.0070867	0.7086679	0.0158158	0.2510590	0.3196489
2021-03-04	121.750	123.600	118.620	120.130	178155000	117.77467	-0.0158119	2021	0.8650	0.0072005	0.7200533	0.0158158	0.2510590	0.3196489
2021-03-05	120.980	121.940	117.570	121.420	153766600	119.03933	0.0107384	2021	0.8650	0.0071240	0.7124032	0.0158158	0.2510590	0.3196489
2021-03-08	120.930	121.000	116.210	116.360	154376600	114.07861	-0.0416735	2021	0.8650	0.0074338	0.7433826	0.0158158	0.2510590	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2021-03-09	119.0300	122.0600	118.7900	121.0900	29525800	18.71586	0.0406497	2021	0.8650	0.0071434	0.7143447	0.0158158	0.2510590	0.3196489
2021-03-10	121.690	122.170	119.450	119.9800	11943300	17.62764	-0.0091667	2021	0.8650	0.0072095	0.7209535	0.0158158	0.2510590	0.3196489
2021-03-11	122.540	123.210	121.260	121.9600	30265000	19.5688	0.0165027	2021	0.8650	0.0070925	0.7092489	0.0158158	0.2510590	0.3196489
2021-03-12	120.400	121.170	119.160	121.0300	8810510	18.65704	-0.0076255	2021	0.8650	0.0071470	0.7146988	0.0158158	0.2510590	0.3196489
2021-03-15	121.410	124.000	120.420	123.9900	9240380	21.5590	0.0244567	2021	0.8650	0.0069764	0.6976369	0.0158158	0.2510590	0.3196489
2021-03-16	125.700	127.220	124.720	125.5700	15227900	23.1080	0.0127430	2021	0.8650	0.0068886	0.6888588	0.0158158	0.2510590	0.3196489
2021-03-17	124.050	125.860	122.340	124.7600	11932600	22.31391	-0.0064506	2021	0.8650	0.0069333	0.6933312	0.0158158	0.2510590	0.3196489
2021-03-18	122.880	123.180	120.320	120.5300	21229700	18.16684	-0.0339051	2021	0.8650	0.0071766	0.7176637	0.0158158	0.2510590	0.3196489
2021-03-19	119.900	121.430	119.680	119.9900	18554950	17.63743	-0.0044802	2021	0.8650	0.0072089	0.7208934	0.0158158	0.2510590	0.3196489
2021-03-22	120.330	123.870	120.260	123.3900	11912300	20.97076	0.0283357	2021	0.8650	0.0070103	0.7010293	0.0158158	0.2510590	0.3196489
2021-03-23	123.330	124.240	122.140	122.5400	9546710	20.13744	-0.0068887	2021	0.8650	0.0070589	0.7058919	0.0158158	0.2510590	0.3196489
2021-03-24	122.820	122.900	120.070	120.9000	8853050	17.73546	-0.0199935	2021	0.8650	0.0072029	0.7202931	0.0158158	0.2510590	0.3196489
2021-03-25	119.540	121.660	119.000	120.5900	8844700	18.22565	0.0041635	2021	0.8650	0.0071731	0.7173066	0.0158158	0.2510590	0.3196489
2021-03-26	120.350	121.480	118.920	121.2100	9407120	18.83352	0.0051414	2021	0.8650	0.0071364	0.7136375	0.0158158	0.2510590	0.3196489
2021-03-29	121.650	122.580	120.730	121.3900	8081920	19.00998	0.0014850	2021	0.8650	0.0071258	0.7125793	0.0158158	0.2510590	0.3196489
2021-03-30	120.1100	120.400	118.860	119.9000	8567190	17.54919	-0.0122745	2021	0.8650	0.0072143	0.7214345	0.0158158	0.2510590	0.3196489
2021-03-31	121.650	123.520	121.150	122.1500	18323800	19.7551	0.0187656	2021	0.8650	0.0070815	0.7081457	0.0158158	0.2510590	0.3196489
2021-04-01	123.660	124.180	122.490	123.0000	7508910	20.5884	0.0069586	2021	0.8650	0.0070325	0.7032520	0.0158158	0.2510590	0.3196489
2021-04-05	123.870	126.160	123.070	125.9000	8865120	23.43157	0.0235772	2021	0.8650	0.0068705	0.6870532	0.0158158	0.2510590	0.3196489
2021-04-06	126.500	127.130	125.650	126.2100	8017130	23.73547	0.0024623	2021	0.8650	0.0068537	0.6853657	0.0158158	0.2510590	0.3196489
2021-04-07	125.830	127.920	125.140	127.9000	8346670	25.39235	0.0133904	2021	0.8650	0.0067631	0.6763096	0.0158158	0.2510590	0.3196489
2021-04-08	128.950	130.390	128.520	130.3600	8884460	27.80411	0.0192338	2021	0.8650	0.0066355	0.6635471	0.0158158	0.2510590	0.3196489
2021-04-09	129.800	133.040	129.470	133.0000	10668700	30.39236	0.0202516	2021	0.8650	0.0065038	0.6503759	0.0158158	0.2510590	0.3196489
2021-04-12	132.520	132.850	130.630	131.2400	9142000	28.66685	-0.0132330	2021	0.8650	0.0065910	0.6590978	0.0158158	0.2510590	0.3196489
2021-04-13	132.440	134.660	131.930	134.4300	9126650	31.79433	0.0243065	2021	0.8650	0.0064346	0.6434576	0.0158158	0.2510590	0.3196489
2021-04-14	134.940	135.000	131.660	132.0300	8722280	29.44139	-0.0178531	2021	0.8650	0.0065515	0.6551541	0.0158158	0.2510590	0.3196489
2021-04-15	133.820	135.000	133.640	134.5000	8934710	31.86296	0.0187079	2021	0.8650	0.0064312	0.6431227	0.0158158	0.2510590	0.3196489
2021-04-16	134.300	134.670	133.280	134.1600	8492240	31.52962	-0.0025279	2021	0.8650	0.0064475	0.6447525	0.0158158	0.2510590	0.3196489
2021-04-19	133.510	135.470	133.340	134.8400	9426420	32.19626	0.0050685	2021	0.8650	0.0064150	0.6415011	0.0158158	0.2510590	0.3196489
2021-04-20	135.020	135.530	131.810	133.1100	9481230	30.50023	-0.0128300	2021	0.8650	0.0064984	0.6498385	0.0158158	0.2510590	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	sdt.return	volatility	volatility_avg
2021-04-21	132.360	133.750	131.300	133.500	6884710	30.88258	0.0029299	2021	0.8650	0.0064794	0.6479401	0.0158158	3.251059	0.3196489
2021-04-22	133.040	134.150	131.410	131.940	8456650	29.35310	-0.0116854	2021	0.8650	0.0065560	0.6556010	0.0158158	3.251059	0.3196489
2021-04-23	132.160	135.120	132.160	134.320	7865750	31.68649	0.0180385	2021	0.8650	0.0064398	0.6439845	0.0158158	3.251059	0.3196489
2021-04-26	134.830	135.060	133.560	134.720	6690510	32.07863	0.0029779	2021	0.8650	0.0064207	0.6420724	0.0158158	3.251059	0.3196489
2021-04-27	135.010	135.410	134.110	134.390	6601580	31.75511	-0.0024495	2021	0.8650	0.0064365	0.6436491	0.0158158	3.251059	0.3196489
2021-04-28	134.310	135.020	133.080	133.580	7760100	30.96097	-0.0060272	2021	0.8650	0.0064755	0.6475520	0.0158158	3.251059	0.3196489
2021-04-29	136.470	137.070	132.450	133.480	5110100	30.86293	-0.0007487	2021	0.8650	0.0064804	0.6480372	0.0158158	3.251059	0.3196489
2021-04-30	131.780	133.560	131.070	131.460	9839500	28.88257	-0.0151333	2021	0.8650	0.0065799	0.6579948	0.0158158	3.251059	0.3196489
2021-05-03	132.040	134.070	131.830	132.540	7513510	29.94135	0.0082153	2021	0.8650	0.0065263	0.6526332	0.0158158	3.251059	0.3196489
2021-05-04	131.190	131.490	126.700	127.850	13756470	25.34332	-0.0353855	2021	0.8650	0.0067657	0.6765741	0.0158158	3.251059	0.3196489
2021-05-05	129.200	130.450	127.970	128.100	8400090	25.58843	0.0019555	2021	0.8650	0.0067525	0.6752537	0.0158158	3.251059	0.3196489
2021-05-06	127.890	129.750	127.130	129.740	7812830	27.19629	0.0128025	2021	0.8650	0.0066672	0.6667180	0.0158158	3.251059	0.3196489
2021-05-07	130.850	131.260	129.480	130.210	7897330	27.87393	0.0036226	2021	0.8650	0.0066431	0.6643115	0.0158158	3.251059	0.3196489
2021-05-10	129.410	129.540	126.810	126.850	8807120	24.57417	-0.0258045	2021	0.8650	0.0068191	0.6819078	0.0158158	3.251059	0.3196489
2021-05-11	123.500	126.270	122.770	125.910	12614280	23.65104	-0.0074103	2021	0.8650	0.0068700	0.6869986	0.0158158	3.251059	0.3196489
2021-05-12	123.400	124.640	122.250	122.770	12172300	20.56736	-0.0249385	2021	0.8650	0.0070457	0.7045695	0.0158158	3.251059	0.3196489
2021-05-13	124.580	126.150	124.260	124.970	5861300	22.72791	0.0179197	2021	0.8650	0.0069217	0.6921661	0.0158158	3.251059	0.3196489
2021-05-14	126.250	127.890	125.850	127.450	8191800	25.16341	0.0198447	2021	0.8650	0.0067870	0.6786975	0.0158158	3.251059	0.3196489
2021-05-17	126.820	126.930	125.170	126.270	7424460	24.00458	-0.0092585	2021	0.8650	0.0068504	0.6850400	0.0158158	3.251059	0.3196489
2021-05-18	126.560	126.990	124.780	124.850	6334290	22.61007	-0.0112457	2021	0.8650	0.0069283	0.6928314	0.0158158	3.251059	0.3196489
2021-05-19	123.160	124.920	122.860	124.690	9261200	22.45293	-0.0012815	2021	0.8650	0.0069372	0.6937204	0.0158158	3.251059	0.3196489
2021-05-20	125.230	127.720	125.100	127.310	7685710	25.02592	0.0210121	2021	0.8650	0.0067944	0.6794439	0.0158158	3.251059	0.3196489
2021-05-21	127.820	128.000	125.210	125.430	7929540	23.17964	-0.0147671	2021	0.8650	0.0068963	0.6896277	0.0158158	3.251059	0.3196489
2021-05-24	126.010	127.940	125.940	127.100	6309290	24.81968	0.0133142	2021	0.8650	0.0068057	0.6805665	0.0158158	3.251059	0.3196489
2021-05-25	127.820	128.320	126.320	126.900	7200950	24.62328	-0.0015735	2021	0.8650	0.0068164	0.6816391	0.0158158	3.251059	0.3196489
2021-05-26	126.960	127.390	126.420	126.850	5657590	24.57417	-0.0003940	2021	0.8650	0.0068191	0.6819078	0.0158158	3.251059	0.3196489
2021-05-27	126.440	127.640	125.080	125.280	9462560	23.03233	-0.0123768	2021	0.8650	0.0069045	0.6904534	0.0158158	3.251059	0.3196489
2021-05-28	125.570	125.800	124.550	124.610	7131110	22.37438	-0.0053480	2021	0.8650	0.0069417	0.6941658	0.0158158	3.251059	0.3196489
2021-06-01	125.080	125.350	123.940	124.280	6763710	22.05027	-0.0026483	2021	0.8650	0.0069601	0.6960090	0.0158158	3.251059	0.3196489
2021-06-02	124.280	125.240	124.050	125.060	6927890	22.81628	0.0062761	2021	0.8650	0.0069167	0.6916680	0.0158158	3.251059	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	sentreturn	volatility	volatility_avg
2021-06-03	124.680	124.850	123.130	123.540	7622920	21.32356	-0.0121541	2021	0.8650	0.0070018	0.7001781	0.0158158	0.3251059	0.3196489
2021-06-04	124.070	126.160	123.850	125.890	7516930	23.6314	0.0190222	2021	0.8650	0.0068711	0.6871078	0.0158158	0.3251059	0.3196489
2021-06-07	126.170	126.320	124.830	125.900	7105760	23.6412	0.0000795	2021	0.8650	0.0068705	0.6870532	0.0158158	0.3251059	0.3196489
2021-06-08	126.600	128.460	126.210	126.740	7440380	24.46610	0.0066719	2021	0.8650	0.0068250	0.6824996	0.0158158	0.3251059	0.3196489
2021-06-09	127.210	127.750	126.520	127.130	5687790	24.84915	0.0030772	2021	0.8650	0.0068041	0.6804059	0.0158158	0.3251059	0.3196489
2021-06-10	127.020	128.190	125.940	126.110	7118640	23.84744	-0.0080233	2021	0.8650	0.0068591	0.6859091	0.0158158	0.3251059	0.3196489
2021-06-11	126.530	127.440	126.100	127.350	5352240	25.06520	0.0098327	2021	0.8650	0.0067923	0.6792305	0.0158158	0.3251059	0.3196489
2021-06-14	127.820	130.540	127.070	130.480	9690650	28.13900	0.0245779	2021	0.8650	0.0066294	0.6629369	0.0158158	0.3251059	0.3196489
2021-06-15	129.940	130.600	129.390	129.640	6274630	27.31412	-0.0064377	2021	0.8650	0.0066723	0.6672323	0.0158158	0.3251059	0.3196489
2021-06-16	130.370	130.890	128.460	130.150	9181500	27.81494	0.0039339	2021	0.8650	0.0066462	0.6646178	0.0158158	0.3251059	0.3196489
2021-06-17	129.800	132.550	129.650	131.790	9672170	29.42552	0.0126008	2021	0.8650	0.0065635	0.6563473	0.0158158	0.3251059	0.3196489
2021-06-18	130.710	131.510	130.240	130.460	8953300	28.11940	-0.0100917	2021	0.8650	0.0066304	0.6630384	0.0158158	0.3251059	0.3196489
2021-06-21	130.300	132.410	129.210	132.300	7966330	29.92644	0.0141039	2021	0.8650	0.0065382	0.6538171	0.0158158	0.3251059	0.3196489
2021-06-22	132.130	134.080	131.620	133.980	7478360	31.57623	0.0126984	2021	0.8650	0.0064562	0.6456188	0.0158158	0.3251059	0.3196489
2021-06-23	133.770	134.320	133.230	133.700	6021420	31.30128	-0.0020899	2021	0.8650	0.0064697	0.6469708	0.0158158	0.3251059	0.3196489
2021-06-24	134.450	134.640	132.930	133.410	6871100	31.01649	-0.0021690	2021	0.8650	0.0064838	0.6483772	0.0158158	0.3251059	0.3196489
2021-06-25	133.460	133.890	132.810	133.110	7078370	30.72186	-0.0022487	2021	0.8650	0.0064984	0.6498385	0.0158158	0.3251059	0.3196489
2021-06-28	133.410	135.250	133.350	134.780	6211130	32.36191	0.0125460	2021	0.8650	0.0064179	0.6417866	0.0158158	0.3251059	0.3196489
2021-06-29	134.800	136.490	134.350	136.330	6455610	33.88408	0.0115002	2021	0.8650	0.0063449	0.6344898	0.0158158	0.3251059	0.3196489
2021-06-30	136.170	137.410	135.870	136.960	6326140	34.50281	0.0046212	2021	0.8650	0.0063157	0.6315712	0.0158158	0.3251059	0.3196489
2021-07-01	136.600	137.330	135.760	137.270	5248580	34.80724	0.0022634	2021	0.8650	0.0063014	0.6301450	0.0158158	0.3251059	0.3196489
2021-07-02	137.900	140.000	137.750	139.960	7885260	37.44897	0.0195964	2021	0.8650	0.0061803	0.6180337	0.0158158	0.3251059	0.3196489
2021-07-06	140.070	143.150	140.070	142.020	8181800	39.47202	0.0147185	2021	0.8650	0.0060907	0.6090691	0.0158158	0.3251059	0.3196489
2021-07-07	143.540	144.890	142.660	144.570	4911600	41.97626	0.0179552	2021	0.8650	0.0059833	0.5983260	0.0158158	0.3251059	0.3196489
2021-07-08	141.580	144.060	140.670	143.240	5575500	40.67014	-0.0091997	2021	0.8650	0.0060388	0.6038816	0.0158158	0.3251059	0.3196489
2021-07-09	142.750	145.650	142.650	145.110	9989080	42.50659	0.0130550	2021	0.8650	0.0059610	0.5960995	0.0158158	0.3251059	0.3196489
2021-07-12	146.210	146.320	144.000	144.500	7629970	41.90753	-0.0042037	2021	0.8650	0.0059862	0.5986159	0.0158158	0.3251059	0.3196489
2021-07-13	144.030	147.460	143.630	145.640	10082710	43.02705	0.0078893	2021	0.8650	0.0059393	0.5939302	0.0158158	0.3251059	0.3196489
2021-07-14	148.100	149.570	147.680	149.150	12705080	46.47408	0.0241005	2021	0.8650	0.0057995	0.5799531	0.0158158	0.3251059	0.3196489
2021-07-15	149.240	150.000	147.090	148.480	10682030	45.81612	-0.0044921	2021	0.8650	0.0058257	0.5825701	0.0158158	0.3251059	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2021-07-16	148.4600	149.7600	145.8800	146.3900	93251400	143.76361	-0.0140759	2021	0.8650	0.0059089	0.5908874	0.015815	8.251059	6.3196489
2021-07-19	143.7500	144.0700	141.6700	142.4500	121434600	139.89427	-0.0269144	2021	0.8650	0.0060723	0.6072306	0.015815	8.251059	6.3196489
2021-07-20	143.4600	147.1000	142.9600	146.1500	96350000	143.52791	0.0259740	2021	0.8650	0.0059186	0.5918577	0.015815	8.251059	6.3196489
2021-07-21	145.5300	146.1300	144.6300	145.4000	74993500	142.79137	-0.0051317	2021	0.8650	0.0059491	0.5949106	0.015815	8.251059	6.3196489
2021-07-22	145.9400	148.2000	145.8100	146.8000	77338200	144.16626	0.0096287	2021	0.8650	0.0058924	0.5892370	0.015815	8.251059	6.3196489
2021-07-23	147.5500	148.7200	146.9200	148.5600	71447400	145.89468	0.0119891	2021	0.8650	0.0058226	0.5822563	0.015815	8.251059	6.3196489
2021-07-26	148.2700	149.8300	147.7000	148.9900	72431000	146.31697	0.0028945	2021	0.8650	0.0058058	0.5805759	0.015815	8.251059	6.3196489
2021-07-27	149.1200	149.2100	145.5500	146.7700	104818600	144.13680	-0.0149003	2021	0.8650	0.0058936	0.5893575	0.015815	8.251059	6.3196489
2021-07-28	144.8100	146.9700	142.5400	144.9800	118931200	142.37889	-0.0121960	2021	0.8650	0.0059663	0.5966340	0.015815	8.251059	6.3196489
2021-07-29	144.6900	146.5500	144.5800	145.6400	56669500	143.02705	0.0045524	2021	0.8650	0.0059393	0.5939302	0.015815	8.251059	6.3196489
2021-07-30	144.3800	146.3300	144.1100	145.8600	70440600	143.24312	0.0015106	2021	0.8650	0.0059303	0.5930344	0.015815	8.251059	6.3196489
2021-08-02	146.3600	146.9500	145.2500	145.5200	62880000	142.90926	-0.0023310	2021	0.8650	0.0059442	0.5944200	0.015815	8.251059	6.3196489
2021-08-03	145.8100	148.0400	145.1800	147.3600	64786600	144.71622	0.0126443	2021	0.8650	0.0058700	0.5869978	0.015815	8.251059	6.3196489
2021-08-04	147.2700	147.7900	146.2800	146.9500	56368300	144.31358	-0.0027823	2021	0.8650	0.0058864	0.5886356	0.015815	8.251059	6.3196489
2021-08-05	146.9800	147.8400	146.1700	147.0600	46397700	144.42159	0.0007486	2021	0.8650	0.0058820	0.5881953	0.015815	8.251059	6.3196489
2021-08-06	146.3500	147.1100	145.6300	146.1400	54126800	143.73314	-0.0062559	2021	0.8650	0.0059190	0.5918982	0.015815	8.251059	6.3196489
2021-08-09	146.2000	146.7000	145.5200	46.0900	48908700	143.68396	-0.0003422	2021	0.8650	0.0059210	0.5921008	0.015815	8.251059	6.3196489
2021-08-10	146.4400	147.7100	145.3000	145.6000	69023100	143.20203	-0.0033540	2021	0.8650	0.0059409	0.5940934	0.015815	8.251059	6.3196489
2021-08-11	146.0500	146.7200	145.5300	145.8600	48493500	143.45775	0.0017857	2021	0.8650	0.0059303	0.5930344	0.015815	8.251059	6.3196489
2021-08-12	146.1900	149.0500	145.8400	148.8900	72282600	146.43784	0.0207733	2021	0.8650	0.0058097	0.5809658	0.015815	8.251059	6.3196489
2021-08-13	148.9700	149.4400	148.2700	149.1000	59375000	146.64438	0.0014105	2021	0.8650	0.0058015	0.5801475	0.015815	8.251059	6.3196489
2021-08-16	148.5400	151.1900	146.4700	151.1200	103296000	148.63110	0.0135479	2021	0.8650	0.0057239	0.5723928	0.015815	8.251059	6.3196489
2021-08-17	150.2300	151.6800	149.0900	150.1900	92229700	147.71642	-0.0061540	2021	0.8650	0.0057594	0.5759371	0.015815	8.251059	6.3196489
2021-08-18	149.8000	150.7200	146.1500	146.3600	86326000	143.94949	-0.0255010	2021	0.8650	0.0059101	0.5910085	0.015815	8.251059	6.3196489
2021-08-19	145.0300	148.0000	144.5000	146.7000	86960300	144.28389	0.0023230	2021	0.8650	0.0058964	0.5896387	0.015815	8.251059	6.3196489
2021-08-20	147.4400	148.5000	146.7800	148.1900	60549600	145.74934	0.0101568	2021	0.8650	0.0058371	0.5837101	0.015815	8.251059	6.3196489
2021-08-23	148.3100	150.1900	147.8900	149.7100	60131800	147.24435	0.0102571	2021	0.8650	0.0057778	0.5777837	0.015815	8.251059	6.3196489
2021-08-24	149.4500	150.8600	149.1500	149.6200	48606400	147.15579	-0.0006012	2021	0.8650	0.0057813	0.5781313	0.015815	8.251059	6.3196489
2021-08-25	149.8100	150.3200	147.8000	148.3600	58991300	145.91656	-0.0084213	2021	0.8650	0.0058304	0.5830412	0.015815	8.251059	6.3196489
2021-08-26	148.3500	149.1200	147.5100	147.5400	48597200	145.11008	-0.0055271	2021	0.8650	0.0058628	0.5862817	0.015815	8.251059	6.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2021-08-27	147.480	148.750	146.830	148.600	55802400	146.15260	0.0071846	2021	0.8650	0.0058210	0.5820996	0.0158158	0.3251059	0.3196489
2021-08-30	149.000	153.490	148.610	153.120	90095670	150.59816	0.0304172	2021	0.8650	0.0056492	0.5649164	0.0158158	0.3251059	0.3196489
2021-08-31	152.660	152.800	151.290	151.830	86453100	149.32939	-0.0084247	2021	0.8650	0.0056972	0.5697161	0.0158158	0.3251059	0.3196489
2021-09-01	152.830	154.980	152.340	152.510	80313700	149.99820	0.0044786	2021	0.8650	0.0056718	0.5671759	0.0158158	0.3251059	0.3196489
2021-09-02	153.870	154.720	152.400	153.650	71111550	151.11943	0.0074749	2021	0.8650	0.0056297	0.5629678	0.0158158	0.3251059	0.3196489
2021-09-03	153.760	154.630	153.090	154.300	57808700	151.75878	0.0042305	2021	0.8650	0.0056060	0.5605962	0.0158158	0.3251059	0.3196489
2021-09-07	154.970	157.260	154.390	156.690	82277300	154.10933	0.0154893	2021	0.8650	0.0055205	0.5520454	0.0158158	0.3251059	0.3196489
2021-09-08	156.980	157.040	153.980	155.110	74420200	152.55537	-0.0100836	2021	0.8650	0.0055767	0.5576687	0.0158158	0.3251059	0.3196489
2021-09-09	155.490	156.110	153.950	154.070	57305700	151.53253	-0.0067049	2021	0.8650	0.0056143	0.5614331	0.0158158	0.3251059	0.3196489
2021-09-10	155.000	155.480	148.700	148.970	140893200	146.51653	-0.0331019	2021	0.8650	0.0058065	0.5806538	0.0158158	0.3251059	0.3196489
2021-09-13	150.630	151.420	148.750	149.550	100240430	147.08698	0.0038934	2021	0.8650	0.0057840	0.5784019	0.0158158	0.3251059	0.3196489
2021-09-14	150.350	151.070	146.910	148.120	100926300	145.68050	-0.0095621	2021	0.8650	0.0058399	0.5839860	0.0158158	0.3251059	0.3196489
2021-09-15	148.560	149.440	146.370	149.030	83281300	146.57552	0.0061437	2021	0.8650	0.0058042	0.5804201	0.0158158	0.3251059	0.3196489
2021-09-16	148.440	148.970	147.220	148.790	68034100	146.33948	-0.0016105	2021	0.8650	0.0058136	0.5813563	0.0158158	0.3251059	0.3196489
2021-09-17	148.820	148.820	145.760	146.060	129868800	143.65442	-0.0183480	2021	0.8650	0.0059222	0.5922224	0.0158158	0.3251059	0.3196489
2021-09-20	143.800	144.840	141.270	142.940	123478900	140.58585	-0.0213611	2021	0.8650	0.0060515	0.6051490	0.0158158	0.3251059	0.3196489
2021-09-21	143.930	144.600	142.780	143.430	75833400	141.06773	0.0034279	2021	0.8650	0.0060308	0.6030817	0.0158158	0.3251059	0.3196489
2021-09-22	144.450	146.430	143.700	145.850	76404300	143.44792	0.0168724	2021	0.8650	0.0059308	0.5930751	0.0158158	0.3251059	0.3196489
2021-09-23	146.650	147.080	145.640	146.830	64838200	144.41179	0.0067192	2021	0.8650	0.0058912	0.5891167	0.0158158	0.3251059	0.3196489
2021-09-24	145.660	147.470	145.560	146.920	53477900	144.50027	0.0006129	2021	0.8650	0.0058876	0.5887558	0.0158158	0.3251059	0.3196489
2021-09-27	145.470	145.960	143.820	145.370	74150700	142.97580	-0.0105500	2021	0.8650	0.0059503	0.5950334	0.0158158	0.3251059	0.3196489
2021-09-28	143.250	144.750	141.690	141.910	108972300	139.57280	-0.0238013	2021	0.8650	0.0060954	0.6095412	0.0158158	0.3251059	0.3196489
2021-09-29	142.470	144.450	142.030	142.830	74602000	140.47765	0.0064830	2021	0.8650	0.0060562	0.6056151	0.0158158	0.3251059	0.3196489
2021-09-30	143.660	144.380	141.280	141.500	89056700	139.16951	-0.0093118	2021	0.8650	0.0061131	0.6113074	0.0158158	0.3251059	0.3196489
2021-10-01	141.900	142.920	139.110	142.650	94639600	140.30058	0.0081272	2021	0.8650	0.0060638	0.6063793	0.0158158	0.3251059	0.3196489
2021-10-04	141.760	142.210	138.270	139.140	98322000	136.84842	-0.0246056	2021	0.8650	0.0062168	0.6216760	0.0158158	0.3251059	0.3196489
2021-10-05	139.490	142.240	139.360	141.110	80861100	138.78597	0.0141584	2021	0.8650	0.0061300	0.6129970	0.0158158	0.3251059	0.3196489
2021-10-06	139.470	142.150	138.370	142.000	83221100	139.66133	0.0063071	2021	0.8650	0.0060915	0.6091549	0.0158158	0.3251059	0.3196489
2021-10-07	143.060	144.220	142.720	143.290	61732700	140.93005	0.0090845	2021	0.8650	0.0060367	0.6036709	0.0158158	0.3251059	0.3196489
2021-10-08	144.030	144.180	142.560	142.900	58773200	140.54646	-0.0027217	2021	0.8650	0.0060532	0.6053184	0.0158158	0.3251059	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	sdreturns	volatility	volatility_avg
2021-10-11	142.2700	144.8100	141.8100	142.8100	64452200	140.45798	-0.0006298	2021	0.8650	0.0060570	0.6056999	0.0158158	0.2510590	0.3196489
2021-10-12	143.2300	143.2500	141.0400	141.5100	73035900	139.17937	-0.0091030	2021	0.8650	0.0061126	0.6112642	0.0158158	0.2510590	0.3196489
2021-10-13	141.2400	141.4000	139.2000	140.9100	78762700	138.58928	-0.0042399	2021	0.8650	0.0061387	0.6138670	0.0158158	0.2510590	0.3196489
2021-10-14	142.1100	143.8800	141.5100	143.7600	69907100	141.39232	0.0202256	2021	0.8650	0.0060170	0.6016973	0.0158158	0.2510590	0.3196489
2021-10-15	143.7700	144.9000	143.5100	144.8400	67940300	142.45454	0.0075125	2021	0.8650	0.0059721	0.5972107	0.0158158	0.2510590	0.3196489
2021-10-18	143.4500	146.8400	143.1600	146.5500	85589200	144.13637	0.0118062	2021	0.8650	0.0059024	0.5902422	0.0158158	0.2510590	0.3196489
2021-10-19	147.0100	149.1700	146.5500	148.7600	76378900	146.30998	0.0150801	2021	0.8650	0.0058147	0.5814735	0.0158158	0.2510590	0.3196489
2021-10-20	148.7000	149.7500	148.1200	149.2600	58418800	146.80174	0.0033611	2021	0.8650	0.0057953	0.5795257	0.0158158	0.2510590	0.3196489
2021-10-21	148.8100	149.6400	147.8700	149.4800	61421000	147.01813	0.0014739	2021	0.8650	0.0057867	0.5786727	0.0158158	0.2510590	0.3196489
2021-10-22	149.6900	150.1800	148.6400	148.6900	58883400	146.24115	-0.0052849	2021	0.8650	0.0058175	0.5817472	0.0158158	0.2510590	0.3196489
2021-10-25	148.6800	149.3700	147.6200	148.6400	50720600	146.19192	-0.0003363	2021	0.8650	0.0058194	0.5819430	0.0158158	0.2510590	0.3196489
2021-10-26	149.3300	150.8400	149.0100	149.3200	60893400	146.86076	0.0045749	2021	0.8650	0.0057929	0.5792928	0.0158158	0.2510590	0.3196489
2021-10-27	149.3600	149.7300	148.4900	148.8500	56094900	146.39850	-0.0031476	2021	0.8650	0.0058112	0.5811219	0.0158158	0.2510590	0.3196489
2021-10-28	149.8200	153.1700	149.7200	152.5700	100007790	150.05724	0.0249916	2021	0.8650	0.0056695	0.5669528	0.0158158	0.2510590	0.3196489
2021-10-29	147.2200	149.9400	146.4100	149.8000	124953200	147.33284	-0.0181556	2021	0.8650	0.0057744	0.5774366	0.0158158	0.2510590	0.3196489
2021-11-01	148.9900	149.7000	147.8000	148.9600	74588300	146.50671	-0.0056075	2021	0.8650	0.0058069	0.5806928	0.0158158	0.2510590	0.3196489
2021-11-02	148.6600	151.5700	148.6500	150.0200	69122000	147.54921	0.0071160	2021	0.8650	0.0057659	0.5765898	0.0158158	0.2510590	0.3196489
2021-11-03	150.3900	151.9700	149.8200	151.4900	54511500	148.99503	0.0097987	2021	0.8650	0.0057099	0.5709948	0.0158158	0.2510590	0.3196489
2021-11-04	151.5800	152.4300	150.6400	150.9600	60394600	148.47372	-0.0034986	2021	0.8650	0.0057300	0.5729994	0.0158158	0.2510590	0.3196489
2021-11-05	151.8900	152.2000	150.0600	151.2800	65463900	149.00563	0.0021197	2021	0.8650	0.0057179	0.5717874	0.0158158	0.2510590	0.3196489
2021-11-08	151.4100	151.5700	150.1600	150.4400	55020900	148.17824	-0.0055526	2021	0.8650	0.0057498	0.5749800	0.0158158	0.2510590	0.3196489
2021-11-09	150.2000	151.4300	150.0600	150.8100	56787900	148.54266	0.0024594	2021	0.8650	0.0057357	0.5735694	0.0158158	0.2510590	0.3196489
2021-11-10	150.0200	150.1300	147.8500	147.9200	65187100	145.69614	-0.0191632	2021	0.8650	0.0058478	0.5847756	0.0158158	0.2510590	0.3196489
2021-11-11	148.9600	149.4300	147.6800	147.8700	41000000	145.64688	-0.0003380	2021	0.8650	0.0058497	0.5849733	0.0158158	0.2510590	0.3196489
2021-11-12	148.4300	150.4000	147.4800	149.9900	63804000	147.73502	0.0143370	2021	0.8650	0.0057671	0.5767051	0.0158158	0.2510590	0.3196489
2021-11-15	150.3700	151.8800	149.4300	150.0000	59222800	147.74486	0.0000666	2021	0.8650	0.0057667	0.5766667	0.0158158	0.2510590	0.3196489
2021-11-16	149.9400	151.4900	149.3400	151.0000	59256200	148.72986	0.0066667	2021	0.8650	0.0057285	0.5728477	0.0158158	0.2510590	0.3196489
2021-11-17	151.0000	155.0000	150.9900	153.4900	88807000	151.18240	0.0164901	2021	0.8650	0.0056355	0.5635546	0.0158158	0.2510590	0.3196489
2021-11-18	153.7100	158.6700	153.0500	157.8700	137827700	155.49655	0.0285360	2021	0.8650	0.0054792	0.5479192	0.0158158	0.2510590	0.3196489
2021-11-19	157.6500	161.0200	156.5300	160.5500	117305600	158.13625	0.0169760	2021	0.8650	0.0053877	0.5387730	0.0158158	0.2510590	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2021-11-22	161.680	165.700	161.000	161.020	17467905	158.5991	0.0029274	2021	0.8650	0.0053720	0.5372003	0.015815	0.2510596	0.3196489
2021-11-23	161.120	161.800	159.060	161.410	9604190	158.9833	0.0024221	2021	0.8650	0.0053590	0.5359023	0.015815	0.2510596	0.3196489
2021-11-24	160.750	162.140	159.640	161.940	6946360	159.5053	0.0032836	2021	0.8650	0.0053415	0.5341484	0.015815	0.2510596	0.3196489
2021-11-26	159.570	160.450	156.360	156.810	7695980	154.45247	-0.0316784	2021	0.8650	0.0055162	0.5516230	0.015815	0.2510596	0.3196489
2021-11-29	159.370	161.190	158.790	160.240	8874820	157.83093	0.0218737	2021	0.8650	0.0053982	0.5398153	0.015815	0.2510596	0.3196489
2021-11-30	159.990	165.520	159.920	165.300	17404810	162.81485	0.0315776	2021	0.8650	0.0052329	0.5232910	0.015815	0.2510596	0.3196489
2021-12-01	167.480	170.300	164.530	164.770	15205250	162.29282	-0.0032063	2021	0.8650	0.0052497	0.5249742	0.015815	0.2510596	0.3196489
2021-12-02	158.740	164.200	157.800	163.760	13673920	161.29797	-0.0061298	2021	0.8650	0.0052821	0.5282120	0.015815	0.2510596	0.3196489
2021-12-03	164.020	164.960	159.720	161.840	11802310	159.40686	-0.0117245	2021	0.8650	0.0053448	0.5344785	0.015815	0.2510596	0.3196489
2021-12-06	164.290	167.880	164.280	165.320	10749700	162.83455	0.0215028	2021	0.8650	0.0052323	0.5232277	0.015815	0.2510596	0.3196489
2021-12-07	169.080	171.580	168.340	171.180	12040540	168.60643	0.0354463	2021	0.8650	0.0050532	0.5053161	0.015815	0.2510596	0.3196489
2021-12-08	172.130	175.960	170.700	175.080	11699890	172.4477	0.0227831	2021	0.8650	0.0049406	0.4940599	0.015815	0.2510596	0.3196489
2021-12-09	174.910	176.750	173.920	174.560	10892370	171.93559	-0.0029701	2021	0.8650	0.0049553	0.4955316	0.015815	0.2510596	0.3196489
2021-12-10	175.210	179.630	174.690	179.450	11540270	176.75209	0.0280133	2021	0.8650	0.0048203	0.4820284	0.015815	0.2510596	0.3196489
2021-12-13	181.120	182.130	175.530	175.740	15323700	173.09790	-0.0206742	2021	0.8650	0.0049220	0.4922044	0.015815	0.2510596	0.3196489
2021-12-14	175.250	177.740	172.210	174.330	13938040	171.70906	-0.0080232	2021	0.8650	0.0049619	0.4961854	0.015815	0.2510596	0.3196489
2021-12-15	175.110	179.500	172.310	179.300	13106330	176.60439	0.0285092	2021	0.8650	0.0048243	0.4824317	0.015815	0.2510596	0.3196489
2021-12-16	179.280	181.140	170.750	172.260	15018580	169.67018	-0.0392639	2021	0.8650	0.0050215	0.5021479	0.015815	0.2510596	0.3196489
2021-12-17	169.930	173.470	169.690	171.140	19543270	168.56703	-0.0065018	2021	0.8650	0.0050543	0.5054341	0.015815	0.2510596	0.3196489
2021-12-20	168.280	170.580	167.460	169.750	10749910	167.19794	-0.0081220	2021	0.8650	0.0050957	0.5095729	0.015815	0.2510596	0.3196489
2021-12-21	171.560	173.200	169.120	172.990	9118590	170.38925	0.0190869	2021	0.8650	0.0050003	0.5000289	0.015815	0.2510596	0.3196489
2021-12-22	173.040	175.860	172.150	175.640	9213530	172.99939	0.0153188	2021	0.8650	0.0049248	0.4924846	0.015815	0.2510596	0.3196489
2021-12-23	175.850	176.850	175.270	176.280	6835660	173.62975	0.0036438	2021	0.8650	0.0049070	0.4906966	0.015815	0.2510596	0.3196489
2021-12-27	177.090	180.420	177.070	180.330	7491960	177.61887	0.0229748	2021	0.8650	0.0047968	0.4796761	0.015815	0.2510596	0.3196489
2021-12-28	180.160	181.330	178.530	179.290	7914430	176.59453	-0.0057673	2021	0.8650	0.0048246	0.4824586	0.015815	0.2510596	0.3196489
2021-12-29	179.330	180.630	178.140	179.380	6234890	176.68317	0.0005020	2021	0.8650	0.0048222	0.4822165	0.015815	0.2510596	0.3196489
2021-12-30	179.470	180.570	178.090	178.200	5977300	175.52090	-0.0065783	2021	0.8650	0.0048541	0.4854097	0.015815	0.2510596	0.3196489
2021-12-31	178.090	179.230	177.260	177.570	6406230	174.90038	-0.0035353	2021	0.8650	0.0048713	0.4871318	0.015815	0.2510596	0.3196489
2022-01-03	177.830	182.880	177.710	182.010	10448790	179.2736	0.0250042	2022	0.9100	0.0049997	0.4999725	0.022486	0.356961	0.3196489
2022-01-04	182.630	182.940	179.120	179.700	9931040	176.99835	-0.0126916	2022	0.9100	0.0050640	0.5063996	0.022486	0.356961	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	sentreturn	volatility	volatility_avg
2022-01-05	179.610	180.170	174.640	174.920	9453760	72.29021	-0.0265999	2022	0.9100	0.0052024	0.5202378	0.022486	0.356961	0.3196489
2022-01-06	172.700	175.300	171.640	172.000	9690400	69.41411	-0.0166933	2022	0.9100	0.0052907	0.5290698	0.022486	0.356961	0.3196489
2022-01-07	172.890	174.140	171.030	172.170	8670910	69.58153	0.0009884	2022	0.9100	0.0052855	0.5285474	0.022486	0.356961	0.3196489
2022-01-10	169.080	172.500	168.170	172.190	10067656	69.60124	0.0001162	2022	0.9100	0.0052849	0.5284860	0.022486	0.356961	0.3196489
2022-01-11	172.320	175.180	170.820	175.080	7613830	72.44778	0.0167838	2022	0.9100	0.0051976	0.5197624	0.022486	0.356961	0.3196489
2022-01-12	176.120	177.180	174.820	175.530	7480520	72.89107	0.0025702	2022	0.9100	0.0051843	0.5184299	0.022486	0.356961	0.3196489
2022-01-13	175.780	176.620	171.790	172.190	8450580	69.60124	-0.0190281	2022	0.9100	0.0052849	0.5284860	0.022486	0.356961	0.3196489
2022-01-14	171.340	173.780	171.090	173.070	8044080	70.46803	0.0051107	2022	0.9100	0.0052580	0.5257988	0.022486	0.356961	0.3196489
2022-01-18	171.510	172.540	169.410	169.800	9095670	67.24716	-0.0188941	2022	0.9100	0.0053592	0.5359246	0.022486	0.356961	0.3196489
2022-01-19	170.000	171.080	165.940	166.230	9481500	63.73084	-0.0210248	2022	0.9100	0.0054743	0.5474343	0.022486	0.356961	0.3196489
2022-01-20	166.980	169.680	164.180	164.510	9142050	62.03670	-0.0103471	2022	0.9100	0.0055316	0.5531579	0.022486	0.356961	0.3196489
2022-01-21	164.420	166.330	162.300	162.410	10228489	59.96828	-0.0127651	2022	0.9100	0.0056031	0.5603103	0.022486	0.356961	0.3196489
2022-01-24	160.020	162.300	154.700	161.620	10622946	59.19016	-0.0048643	2022	0.9100	0.0056305	0.5630491	0.022486	0.356961	0.3196489
2022-01-25	158.980	162.760	157.020	159.780	10157984	57.37784	-0.0113847	2022	0.9100	0.0056953	0.5695331	0.022486	0.356961	0.3196489
2022-01-26	163.500	164.390	157.820	159.690	10082753	57.28918	-0.0005633	2022	0.9100	0.0056985	0.5698541	0.022486	0.356961	0.3196489
2022-01-27	162.450	163.840	158.280	159.220	10219546	56.82625	-0.0029432	2022	0.9100	0.0057154	0.5715362	0.022486	0.356961	0.3196489
2022-01-28	165.710	170.350	162.800	170.330	17993570	67.76923	0.0697777	2022	0.9100	0.0053426	0.5342570	0.022486	0.356961	0.3196489
2022-01-31	170.160	175.000	169.510	174.780	11554160	72.15230	0.0261257	2022	0.9100	0.0052065	0.5206545	0.022486	0.356961	0.3196489
2022-02-01	174.010	174.840	172.310	174.610	8621390	71.98488	-0.0009726	2022	0.9100	0.0052116	0.5211614	0.022486	0.356961	0.3196489
2022-02-02	174.750	175.880	173.330	175.840	8491430	73.19638	0.0070442	2022	0.9100	0.0051752	0.5175159	0.022486	0.356961	0.3196489
2022-02-03	174.480	176.240	172.120	172.900	8941810	70.30057	-0.0167198	2022	0.9100	0.0052632	0.5263158	0.022486	0.356961	0.3196489
2022-02-04	171.680	174.100	170.680	172.390	8246540	70.01457	-0.0029497	2022	0.9100	0.0052787	0.5278728	0.022486	0.356961	0.3196489
2022-02-07	172.860	173.950	170.950	171.660	7725120	69.29463	-0.0042346	2022	0.9100	0.0053012	0.5301177	0.022486	0.356961	0.3196489
2022-02-08	171.730	175.350	171.430	174.830	7482920	72.42096	0.0184667	2022	0.9100	0.0052051	0.5205056	0.022486	0.356961	0.3196489
2022-02-09	176.050	176.650	174.900	176.280	7128500	73.85097	0.0082938	2022	0.9100	0.0051622	0.5162242	0.022486	0.356961	0.3196489
2022-02-10	174.140	175.480	171.550	172.120	9086590	69.74829	-0.0235988	2022	0.9100	0.0052870	0.5287009	0.022486	0.356961	0.3196489
2022-02-11	172.330	173.080	168.040	168.640	9867070	66.31625	-0.0202184	2022	0.9100	0.0053961	0.5396110	0.022486	0.356961	0.3196489
2022-02-14	167.370	169.580	166.560	168.880	8618550	66.55293	0.0014232	2022	0.9100	0.0053884	0.5388441	0.022486	0.356961	0.3196489
2022-02-15	170.970	172.950	170.250	172.790	6252740	70.40909	0.0231525	2022	0.9100	0.0052665	0.5266509	0.022486	0.356961	0.3196489
2022-02-16	171.850	173.340	170.050	172.550	6117740	70.17236	-0.0013889	2022	0.9100	0.0052738	0.5273834	0.022486	0.356961	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	returns	volatility	volatility_avg
2022-02-17	171.030	171.910	168.470	168.880	69589300	166.55293	-0.0212692	2022	0.9100	0.0053884	0.5388441	0.022486	0.356961	0.3196489
2022-02-18	169.820	170.540	166.190	167.300	82772700	164.99472	-0.0093558	2022	0.9100	0.0054393	0.5439330	0.022486	0.356961	0.3196489
2022-02-22	164.980	166.690	162.150	164.320	91162800	162.05577	-0.0178123	2022	0.9100	0.0055380	0.5537974	0.022486	0.356961	0.3196489
2022-02-23	165.540	166.150	159.750	160.070	90000920	157.86433	-0.0258642	2022	0.9100	0.0056850	0.5685013	0.022486	0.356961	0.3196489
2022-02-24	152.580	162.850	152.000	162.740	141147500	160.49757	0.0166802	2022	0.9100	0.0055917	0.5591741	0.022486	0.356961	0.3196489
2022-02-25	163.840	165.120	160.870	164.850	91197420	162.57845	0.0129655	2022	0.9100	0.0055202	0.5520170	0.022486	0.356961	0.3196489
2022-02-28	163.060	165.420	162.430	165.120	95056600	162.84476	0.0016378	2022	0.9100	0.0055111	0.5511144	0.022486	0.356961	0.3196489
2022-03-01	164.700	166.600	161.970	163.200	83474400	160.95119	-0.0116279	2022	0.9100	0.0055760	0.5575980	0.022486	0.356961	0.3196489
2022-03-02	164.390	167.360	162.950	166.560	79724800	164.26491	0.0205882	2022	0.9100	0.0054635	0.5463497	0.022486	0.356961	0.3196489
2022-03-03	168.470	168.910	165.550	166.230	76678400	163.93944	-0.0019813	2022	0.9100	0.0054743	0.5474343	0.022486	0.356961	0.3196489
2022-03-04	164.490	165.550	162.100	163.170	83737200	160.92162	-0.0184082	2022	0.9100	0.0055770	0.5577006	0.022486	0.356961	0.3196489
2022-03-07	163.360	165.020	159.040	159.300	96418800	157.10497	-0.0237176	2022	0.9100	0.0057125	0.5712492	0.022486	0.356961	0.3196489
2022-03-08	158.820	162.880	155.800	157.440	131148300	155.27058	-0.0116761	2022	0.9100	0.0057800	0.5779980	0.022486	0.356961	0.3196489
2022-03-09	161.480	163.410	159.410	162.950	91454900	160.70465	0.0349974	2022	0.9100	0.0055845	0.5584535	0.022486	0.356961	0.3196489
2022-03-10	160.200	160.390	155.980	158.520	105342000	156.33569	-0.0271862	2022	0.9100	0.0057406	0.5740600	0.022486	0.356961	0.3196489
2022-03-11	158.930	159.280	154.500	154.730	96970100	152.59793	-0.0239087	2022	0.9100	0.0058812	0.5881213	0.022486	0.356961	0.3196489
2022-03-14	151.450	154.120	150.100	150.620	108732100	148.54456	-0.0265624	2022	0.9100	0.0060417	0.6041695	0.022486	0.356961	0.3196489
2022-03-15	150.900	155.570	150.380	155.090	92964300	152.95294	0.0296773	2022	0.9100	0.0058676	0.5867561	0.022486	0.356961	0.3196489
2022-03-16	157.050	160.000	154.460	159.590	102300200	157.39098	0.0290154	2022	0.9100	0.0057021	0.5702112	0.022486	0.356961	0.3196489
2022-03-17	158.610	161.000	157.630	160.620	75615400	158.40675	0.0064540	2022	0.9100	0.0056655	0.5665546	0.022486	0.356961	0.3196489
2022-03-18	160.510	164.480	159.760	163.980	123511700	161.72047	0.0209189	2022	0.9100	0.0055495	0.5549457	0.022486	0.356961	0.3196489
2022-03-21	163.510	166.350	163.010	165.380	95811400	163.10118	0.0085377	2022	0.9100	0.0055025	0.5502479	0.022486	0.356961	0.3196489
2022-03-22	165.510	169.420	164.910	168.820	81153200	166.49379	0.0208006	2022	0.9100	0.0053904	0.5390356	0.022486	0.356961	0.3196489
2022-03-23	167.990	172.640	167.650	170.210	98062700	167.86464	0.0082336	2022	0.9100	0.0053463	0.5346337	0.022486	0.356961	0.3196489
2022-03-24	171.060	174.140	170.210	174.070	90131400	171.67140	0.0226779	2022	0.9100	0.0052278	0.5227782	0.022486	0.356961	0.3196489
2022-03-25	173.880	175.280	172.750	174.720	80546200	172.31248	0.0037341	2022	0.9100	0.0052083	0.5208333	0.022486	0.356961	0.3196489
2022-03-28	172.170	175.730	172.000	175.600	90371900	173.18034	0.0050367	2022	0.9100	0.0051822	0.5182232	0.022486	0.356961	0.3196489
2022-03-29	176.690	179.010	176.340	178.960	100589400	176.49403	0.0191344	2022	0.9100	0.0050849	0.5084935	0.022486	0.356961	0.3196489
2022-03-30	178.550	179.610	176.700	177.770	92633200	175.32045	-0.0066495	2022	0.9100	0.0051190	0.5118974	0.022486	0.356961	0.3196489
2022-03-31	177.840	178.030	174.400	174.610	103049300	172.20399	-0.0177758	2022	0.9100	0.0052116	0.5211614	0.022486	0.356961	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2022-04-01	174.030	174.880	171.940	174.310	78751300	171.90813	-0.0017181	2022	0.9100	0.0052206	0.5220584	0.022486	0.356961	0.3196489
2022-04-04	174.570	178.490	174.440	178.440	76468400	175.9812	0.0236934	2022	0.9100	0.0050998	0.5099753	0.022486	0.356961	0.3196489
2022-04-05	177.500	178.300	174.420	175.060	73401800	172.64777	-0.0189420	2022	0.9100	0.0051982	0.5198218	0.022486	0.356961	0.3196489
2022-04-06	172.360	173.630	170.130	171.830	89058800	169.46230	-0.0184508	2022	0.9100	0.0052959	0.5295932	0.022486	0.356961	0.3196489
2022-04-07	171.160	173.360	169.850	172.140	77594700	169.76802	0.0018041	2022	0.9100	0.0052864	0.5286395	0.022486	0.356961	0.3196489
2022-04-08	171.780	171.780	169.200	170.090	76575500	167.74628	-0.0119089	2022	0.9100	0.0053501	0.5350109	0.022486	0.356961	0.3196489
2022-04-11	168.710	169.030	165.500	165.750	72246700	163.46606	-0.0255159	2022	0.9100	0.0054902	0.5490196	0.022486	0.356961	0.3196489
2022-04-12	168.020	169.870	166.640	167.660	79265200	165.34978	0.0115234	2022	0.9100	0.0054277	0.5427651	0.022486	0.356961	0.3196489
2022-04-13	167.390	171.040	166.770	170.400	70618900	168.05199	0.0163425	2022	0.9100	0.0053404	0.5340376	0.022486	0.356961	0.3196489
2022-04-14	170.620	171.270	165.040	165.290	75329400	163.01244	-0.0299883	2022	0.9100	0.0055055	0.5505475	0.022486	0.356961	0.3196489
2022-04-18	163.920	166.600	163.570	165.070	69023900	162.79546	-0.0013309	2022	0.9100	0.0055128	0.5512813	0.022486	0.356961	0.3196489
2022-04-19	165.020	167.820	163.910	167.400	67723800	165.0933	0.0141151	2022	0.9100	0.0054361	0.5436081	0.022486	0.356961	0.3196489
2022-04-20	168.760	168.880	166.100	167.230	67929800	164.92566	-0.0010155	2022	0.9100	0.0054416	0.5441608	0.022486	0.356961	0.3196489
2022-04-21	168.910	171.530	165.910	166.420	87227800	164.12683	-0.0048436	2022	0.9100	0.0054681	0.5468093	0.022486	0.356961	0.3196489
2022-04-22	166.460	167.870	161.500	161.790	84882400	159.56061	-0.0278212	2022	0.9100	0.0056246	0.5624575	0.022486	0.356961	0.3196489
2022-04-25	161.120	163.170	158.460	162.880	96046400	160.63562	0.0067372	2022	0.9100	0.0055869	0.5586935	0.022486	0.356961	0.3196489
2022-04-26	162.250	162.340	156.720	156.800	95623200	154.63942	-0.0373281	2022	0.9100	0.0058036	0.5803571	0.022486	0.356961	0.3196489
2022-04-27	155.910	159.790	155.380	156.570	88063200	154.41257	-0.0014668	2022	0.9100	0.0058121	0.5812097	0.022486	0.356961	0.3196489
2022-04-28	159.250	164.520	158.930	163.640	130216800	161.38513	0.0451555	2022	0.9100	0.0055610	0.5560988	0.022486	0.356961	0.3196489
2022-04-29	161.840	166.200	157.250	157.650	131747600	155.47768	-0.0366048	2022	0.9100	0.0057723	0.5772281	0.022486	0.356961	0.3196489
2022-05-02	156.710	158.230	153.270	157.960	123055300	155.78340	0.0019665	2022	0.9100	0.0057610	0.5760952	0.022486	0.356961	0.3196489
2022-05-03	158.150	160.710	156.320	159.480	88966500	157.28246	0.0096226	2022	0.9100	0.0057060	0.5706045	0.022486	0.356961	0.3196489
2022-05-04	159.670	166.480	159.260	166.020	108256500	163.73236	0.0410083	2022	0.9100	0.0054813	0.5481267	0.022486	0.356961	0.3196489
2022-05-05	163.850	164.080	154.950	156.770	130525300	154.60983	-0.0557162	2022	0.9100	0.0058047	0.5804682	0.022486	0.356961	0.3196489
2022-05-06	156.010	159.440	154.180	157.280	116124600	155.34067	0.0032531	2022	0.9100	0.0057859	0.5785860	0.022486	0.356961	0.3196489
2022-05-09	154.930	155.830	151.490	152.060	131577900	150.18506	-0.0331892	2022	0.9100	0.0059845	0.5984480	0.022486	0.356961	0.3196489
2022-05-10	155.520	156.740	152.930	154.510	115366700	152.6048	0.0161120	2022	0.9100	0.0058896	0.5889587	0.022486	0.356961	0.3196489
2022-05-11	153.500	155.450	145.810	146.500	142689800	144.69359	-0.0518413	2022	0.9100	0.0062116	0.6211604	0.022486	0.356961	0.3196489
2022-05-12	142.770	146.200	138.800	142.560	182602000	140.80220	-0.0268942	2022	0.9100	0.0063833	0.6383277	0.022486	0.356961	0.3196489
2022-05-13	144.590	148.100	143.110	147.110	113990900	145.29610	0.0319164	2022	0.9100	0.0061858	0.6185847	0.022486	0.356961	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2022-05-16	145.5500	147.5200	144.1800	145.5400	86643800	143.74544	-0.0106723	2022	0.9100	0.0062526	0.6252577	0.0224860	0.3569610	0.3196489
2022-05-17	148.8600	149.7700	146.6800	149.2400	78336300	147.39980	0.0254226	2022	0.9100	0.0060976	0.6097561	0.0224860	0.3569610	0.3196489
2022-05-18	146.8500	147.3600	139.9000	140.8200	109742900	139.08365	-0.0564192	2022	0.9100	0.0064621	0.6462150	0.0224860	0.3569610	0.3196489
2022-05-19	139.8800	141.6600	136.6000	137.3500	36095600	135.65643	-0.0246414	2022	0.9100	0.0066254	0.6625409	0.0224860	0.3569610	0.3196489
2022-05-20	139.0900	140.7000	132.6100	137.5900	37426100	135.89343	0.0017473	2022	0.9100	0.0066139	0.6613853	0.0224860	0.3569610	0.3196489
2022-05-23	137.7900	143.2600	137.6500	143.1100	117726300	141.34544	0.0401192	2022	0.9100	0.0063587	0.6358745	0.0224860	0.3569610	0.3196489
2022-05-24	140.8100	141.9700	137.3300	140.3600	104132700	138.62929	-0.0192160	2022	0.9100	0.0064833	0.6483329	0.0224860	0.3569610	0.3196489
2022-05-25	138.4300	141.7900	138.3400	140.5200	92482700	138.78734	0.0011400	2022	0.9100	0.0064759	0.6475946	0.0224860	0.3569610	0.3196489
2022-05-26	137.3900	144.3400	137.1400	143.7800	90601500	142.00718	0.0231995	2022	0.9100	0.0063291	0.6329114	0.0224860	0.3569610	0.3196489
2022-05-27	145.3900	149.6800	145.2600	149.6400	90978500	147.79491	0.0407567	2022	0.9100	0.0060813	0.6081262	0.0224860	0.3569610	0.3196489
2022-05-31	149.0700	150.6600	146.8400	148.8400	103718400	147.00475	-0.0053462	2022	0.9100	0.0061139	0.6113948	0.0224860	0.3569610	0.3196489
2022-06-01	149.9000	151.7400	147.6800	148.7100	74286600	146.87636	-0.0008734	2022	0.9100	0.0061193	0.6119292	0.0224860	0.3569610	0.3196489
2022-06-02	147.8300	151.2700	146.8600	151.2100	72348100	149.34555	0.0168112	2022	0.9100	0.0060181	0.6018120	0.0224860	0.3569610	0.3196489
2022-06-03	146.9000	147.9700	144.4600	145.3800	88570300	143.58743	-0.0385557	2022	0.9100	0.0062595	0.6259458	0.0224860	0.3569610	0.3196489
2022-06-06	147.0300	148.5700	144.9000	146.1400	71598400	144.33804	0.0052276	2022	0.9100	0.0062269	0.6226906	0.0224860	0.3569610	0.3196489
2022-06-07	144.3500	149.0000	144.1000	148.7100	67808200	146.87636	0.0175859	2022	0.9100	0.0061193	0.6119292	0.0224860	0.3569610	0.3196489
2022-06-08	148.5800	149.8700	147.4600	147.9600	53950200	146.13560	-0.0050434	2022	0.9100	0.0061503	0.6150311	0.0224860	0.3569610	0.3196489
2022-06-09	147.0800	147.9500	142.5300	142.6400	69473000	140.88120	-0.0359557	2022	0.9100	0.0063797	0.6379697	0.0224860	0.3569610	0.3196489
2022-06-10	140.2800	140.7600	137.0600	137.1300	91437900	135.43916	-0.0386287	2022	0.9100	0.0066360	0.6636039	0.0224860	0.3569610	0.3196489
2022-06-13	132.8700	135.2000	131.4400	131.8800	122207100	130.25389	-0.0382848	2022	0.9100	0.0069002	0.6900212	0.0224860	0.3569610	0.3196489
2022-06-14	133.1300	133.8900	131.4800	132.7600	84784300	131.12302	0.0066727	2022	0.9100	0.0068545	0.6854475	0.0224860	0.3569610	0.3196489
2022-06-15	134.2900	137.3400	132.1600	135.4300	91533000	133.76009	0.0201115	2022	0.9100	0.0067193	0.6719339	0.0224860	0.3569610	0.3196489
2022-06-16	132.0800	132.3900	129.0400	130.0600	108123900	128.45631	-0.0396514	2022	0.9100	0.0069968	0.6996771	0.0224860	0.3569610	0.3196489
2022-06-17	130.0700	133.0800	129.8100	131.5600	134520300	129.93784	0.0115331	2022	0.9100	0.0069170	0.6916996	0.0224860	0.3569610	0.3196489
2022-06-21	133.4200	137.0600	133.3200	135.8700	81100050	134.19460	0.0327607	2022	0.9100	0.0066976	0.6697579	0.0224860	0.3569610	0.3196489
2022-06-22	134.7900	137.7600	133.9100	135.3500	73409200	133.68108	-0.0038271	2022	0.9100	0.0067233	0.6723310	0.0224860	0.3569610	0.3196489
2022-06-23	136.8200	138.5900	135.6300	138.2700	72433800	136.56509	0.0215737	2022	0.9100	0.0065813	0.6581326	0.0224860	0.3569610	0.3196489
2022-06-24	139.9000	141.9100	139.7700	141.6600	89116800	139.91328	0.0245172	2022	0.9100	0.0064238	0.6423832	0.0224860	0.3569610	0.3196489
2022-06-27	142.7000	143.4900	140.9700	141.6600	70207900	139.91328	0.0000000	2022	0.9100	0.0064238	0.6423832	0.0224860	0.3569610	0.3196489
2022-06-28	142.1300	143.4200	137.3200	137.4400	67083400	135.74532	-0.0297896	2022	0.9100	0.0066211	0.6621071	0.0224860	0.3569610	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2022-06-29	137.460	140.670	136.670	139.230	66242400	137.51324	0.0130238	2022	0.9100	0.0065359	0.6535948	0.0224864	0.356961	0.3196489
2022-06-30	137.250	138.370	133.770	136.720	98964500	135.03421	-0.0180277	2022	0.9100	0.0066559	0.6655939	0.0224864	0.356961	0.3196489
2022-07-01	136.040	139.040	135.660	138.930	71051600	137.21693	0.0161644	2022	0.9100	0.0065501	0.6550062	0.0224864	0.356961	0.3196489
2022-07-05	137.770	141.610	136.930	141.560	73353800	139.81453	0.0189304	2022	0.9100	0.0064284	0.6428370	0.0224864	0.356961	0.3196489
2022-07-06	141.350	144.120	141.080	142.920	74064300	141.15773	0.0096072	2022	0.9100	0.0063672	0.6367199	0.0224864	0.356961	0.3196489
2022-07-07	143.290	146.550	143.280	146.350	66253700	144.54541	0.0239995	2022	0.9100	0.0062180	0.6217970	0.0224864	0.356961	0.3196489
2022-07-08	145.260	147.550	145.000	147.040	64547800	145.22696	0.0047146	2022	0.9100	0.0061888	0.6188792	0.0224864	0.356961	0.3196489
2022-07-11	145.670	146.640	143.780	144.870	63141600	143.08369	-0.0147579	2022	0.9100	0.0062815	0.6281494	0.0224864	0.356961	0.3196489
2022-07-12	145.760	148.450	145.050	145.860	77588800	144.06148	0.0068338	2022	0.9100	0.0062389	0.6238859	0.0224864	0.356961	0.3196489
2022-07-13	142.990	146.450	142.120	145.490	71185600	143.69608	-0.0025366	2022	0.9100	0.0062547	0.6254725	0.0224864	0.356961	0.3196489
2022-07-14	144.080	148.950	143.250	148.470	78140700	146.63931	0.0204825	2022	0.9100	0.0061292	0.6129184	0.0224864	0.356961	0.3196489
2022-07-15	149.780	150.860	148.200	150.170	76259900	148.31834	0.0114501	2022	0.9100	0.0060598	0.6059799	0.0224864	0.356961	0.3196489
2022-07-18	150.740	151.570	146.700	147.070	81420900	145.25661	-0.0206432	2022	0.9100	0.0061875	0.6187529	0.0224864	0.356961	0.3196489
2022-07-19	147.920	151.230	146.910	151.000	82982400	149.13811	0.0267219	2022	0.9100	0.0060265	0.6026490	0.0224864	0.356961	0.3196489
2022-07-20	151.120	153.720	150.370	153.040	64823400	151.15298	0.0135099	2022	0.9100	0.0059462	0.5946158	0.0224864	0.356961	0.3196489
2022-07-21	154.500	155.570	151.940	155.350	65086600	153.43448	0.0150942	2022	0.9100	0.0058577	0.5857740	0.0224864	0.356961	0.3196489
2022-07-22	155.390	156.280	153.410	154.090	66675400	152.19002	-0.0081108	2022	0.9100	0.0059056	0.5905640	0.0224864	0.356961	0.3196489
2022-07-25	154.010	155.040	152.280	152.950	53623900	151.06407	-0.0073983	2022	0.9100	0.0059497	0.5949657	0.0224864	0.356961	0.3196489
2022-07-26	152.260	153.090	150.800	151.600	55138700	149.73073	-0.0088264	2022	0.9100	0.0060026	0.6002638	0.0224864	0.356961	0.3196489
2022-07-27	152.580	157.330	152.160	156.790	78620700	154.85672	0.0342347	2022	0.9100	0.0058039	0.5803942	0.0224864	0.356961	0.3196489
2022-07-28	156.980	157.640	154.410	157.350	81378700	155.40984	0.0035717	2022	0.9100	0.0057833	0.5783285	0.0224864	0.356961	0.3196489
2022-07-29	161.240	163.630	159.500	162.510	101786900	160.50620	0.0327931	2022	0.9100	0.0055997	0.5599656	0.0224864	0.356961	0.3196489
2022-08-01	161.010	163.590	160.890	161.510	67829400	159.51851	-0.0061535	2022	0.9100	0.0056343	0.5634326	0.0224864	0.356961	0.3196489
2022-08-02	160.100	162.410	159.630	160.010	59907000	158.03702	-0.0092874	2022	0.9100	0.0056871	0.5687145	0.0224864	0.356961	0.3196489
2022-08-03	160.840	166.590	160.750	166.130	82507500	164.08157	0.0382477	2022	0.9100	0.0054776	0.5477638	0.0224864	0.356961	0.3196489
2022-08-04	166.010	167.190	164.430	165.810	55474100	163.76552	-0.0019262	2022	0.9100	0.0054882	0.5488209	0.0224864	0.356961	0.3196489
2022-08-05	163.210	165.850	163.000	165.350	56697000	163.53802	-0.0027742	2022	0.9100	0.0055035	0.5503477	0.0224864	0.356961	0.3196489
2022-08-08	166.370	167.810	164.200	164.870	60276900	163.06326	-0.0029030	2022	0.9100	0.0055195	0.5519500	0.0224864	0.356961	0.3196489
2022-08-09	164.020	165.820	163.250	164.920	63135500	163.11273	0.0003033	2022	0.9100	0.0055178	0.5517827	0.0224864	0.356961	0.3196489
2022-08-10	167.680	169.340	166.900	169.240	70170500	167.38539	0.0261946	2022	0.9100	0.0053770	0.5376979	0.0224864	0.356961	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2022-08-11	170.060	170.990	168.190	168.490	57149200	166.64363	-0.0044316	2022	0.9100	0.0054009	0.5400914	0.0224860	0.356961	0.3196489
2022-08-12	169.820	172.170	169.400	172.100	68039400	170.21407	0.0214256	2022	0.9100	0.0052876	0.5287623	0.0224860	0.356961	0.3196489
2022-08-15	171.520	173.390	171.350	173.190	54091700	171.29210	0.0063335	2022	0.9100	0.0052543	0.5254345	0.0224860	0.356961	0.3196489
2022-08-16	172.780	173.710	171.660	173.030	56377100	171.13385	-0.0009239	2022	0.9100	0.0052592	0.5259204	0.0224860	0.356961	0.3196489
2022-08-17	172.770	176.150	172.570	174.550	79542000	172.63719	0.0087846	2022	0.9100	0.0052134	0.5213406	0.0224860	0.356961	0.3196489
2022-08-18	173.750	174.900	173.120	174.150	62290100	172.24159	-0.0022917	2022	0.9100	0.0052254	0.5225381	0.0224860	0.356961	0.3196489
2022-08-19	173.030	173.740	171.310	171.520	70346300	169.64040	-0.0151019	2022	0.9100	0.0053055	0.5305504	0.0224860	0.356961	0.3196489
2022-08-22	169.690	169.860	167.140	167.570	69022680	165.73372	-0.0230294	2022	0.9100	0.0054306	0.5430566	0.0224860	0.356961	0.3196489
2022-08-23	167.080	168.710	166.650	167.230	54147100	165.39742	-0.0020291	2022	0.9100	0.0054416	0.5441608	0.0224860	0.356961	0.3196489
2022-08-24	167.320	168.110	166.250	167.530	53841500	165.69412	0.0017940	2022	0.9100	0.0054319	0.5431863	0.0224860	0.356961	0.3196489
2022-08-25	168.780	170.140	168.350	170.030	51218200	168.16675	0.0149227	2022	0.9100	0.0053520	0.5351997	0.0224860	0.356961	0.3196489
2022-08-26	170.570	171.050	163.560	163.620	78961000	161.82697	-0.0376993	2022	0.9100	0.0055617	0.5561667	0.0224860	0.356961	0.3196489
2022-08-29	161.150	162.900	159.820	161.380	73314000	159.61154	-0.0136902	2022	0.9100	0.0056389	0.5638865	0.0224860	0.356961	0.3196489
2022-08-30	162.130	162.560	157.720	158.910	77906200	157.16859	-0.0153055	2022	0.9100	0.0057265	0.5726512	0.0224860	0.356961	0.3196489
2022-08-31	160.310	160.580	157.140	157.220	87991100	155.49712	-0.0106350	2022	0.9100	0.0057881	0.5788068	0.0224860	0.356961	0.3196489
2022-09-01	156.640	158.420	154.670	157.960	74229900	156.22903	0.0047068	2022	0.9100	0.0057610	0.5760952	0.0224860	0.356961	0.3196489
2022-09-02	159.750	160.360	154.970	155.810	76957800	154.10257	-0.0136111	2022	0.9100	0.0058404	0.5840447	0.0224860	0.356961	0.3196489
2022-09-06	156.470	157.090	153.690	154.530	73714800	152.83656	-0.0082151	2022	0.9100	0.0058888	0.5888824	0.0224860	0.356961	0.3196489
2022-09-07	154.820	156.670	153.610	155.960	87449600	154.25096	0.0092539	2022	0.9100	0.0058348	0.5834829	0.0224860	0.356961	0.3196489
2022-09-08	154.640	156.360	152.680	154.460	84923800	152.76736	-0.0096179	2022	0.9100	0.0058915	0.5891493	0.0224860	0.356961	0.3196489
2022-09-09	155.470	157.820	154.750	157.370	68028800	155.64548	0.0188398	2022	0.9100	0.0057826	0.5782551	0.0224860	0.356961	0.3196489
2022-09-12	159.590	164.260	159.300	163.430	104956000	161.63907	0.0385080	2022	0.9100	0.0055681	0.5568133	0.0224860	0.356961	0.3196489
2022-09-13	159.900	160.540	153.370	153.840	122656000	152.15414	-0.0586795	2022	0.9100	0.0059152	0.5915237	0.0224860	0.356961	0.3196489
2022-09-14	154.790	157.100	153.610	155.310	87796540	153.60806	0.0095554	2022	0.9100	0.0058592	0.5859249	0.0224860	0.356961	0.3196489
2022-09-15	154.650	155.240	151.380	152.370	90481100	150.70024	-0.0189299	2022	0.9100	0.0059723	0.5972304	0.0224860	0.356961	0.3196489
2022-09-16	151.210	151.350	148.370	150.700	162278800	149.04855	-0.0109602	2022	0.9100	0.0060385	0.6038487	0.0224860	0.356961	0.3196489
2022-09-19	149.310	154.560	149.100	154.480	81474200	152.78714	0.0250829	2022	0.9100	0.0058907	0.5890730	0.0224860	0.356961	0.3196489
2022-09-20	153.400	158.080	153.080	156.900	107689800	155.18063	0.0156654	2022	0.9100	0.0057999	0.5799873	0.0224860	0.356961	0.3196489
2022-09-21	157.340	158.740	153.600	153.720	101696800	152.03548	-0.0202676	2022	0.9100	0.0059199	0.5919854	0.0224860	0.356961	0.3196489
2022-09-22	152.380	154.470	150.910	152.740	86652500	151.06624	-0.0063752	2022	0.9100	0.0059578	0.5957837	0.0224860	0.356961	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2022-09-23	151.1900	151.4700	148.5600	150.4300	96029900	148.78149	-0.0151238	2022	0.9100	0.0060493	0.6049326	0.0224860	0.356961	0.3196489
2022-09-26	149.6600	153.7700	149.6400	150.7700	93339400	149.11781	0.0022603	2022	0.9100	0.0060357	0.6035683	0.0224860	0.356961	0.3196489
2022-09-27	152.7400	154.7200	149.9500	151.7600	84442700	150.09691	0.0065662	2022	0.9100	0.0059963	0.5996310	0.0224860	0.356961	0.3196489
2022-09-28	147.6400	150.6400	144.8400	149.8400	46691400	148.19798	-0.0126515	2022	0.9100	0.0060731	0.6073145	0.0224860	0.356961	0.3196489
2022-09-29	146.1000	146.7200	140.6800	142.4800	28138200	140.91864	-0.0491191	2022	0.9100	0.0063869	0.6386862	0.0224860	0.356961	0.3196489
2022-09-30	141.2800	143.1000	138.0000	138.2000	24925300	136.68555	-0.0300393	2022	0.9100	0.0065847	0.6584660	0.0224860	0.356961	0.3196489
2022-10-03	138.2100	143.0700	137.6900	142.4500	14311700	140.88896	0.0307525	2022	0.9100	0.0063882	0.6388207	0.0224860	0.356961	0.3196489
2022-10-04	145.0300	146.2200	144.2600	146.1000	87830100	144.49896	0.0256231	2022	0.9100	0.0062286	0.6228610	0.0224860	0.356961	0.3196489
2022-10-05	144.0700	147.3800	143.0100	146.4000	79471000	144.79567	0.0020533	2022	0.9100	0.0062158	0.6215847	0.0224860	0.356961	0.3196489
2022-10-06	145.8100	147.5400	145.2200	145.4300	68402200	143.83630	-0.0066257	2022	0.9100	0.0062573	0.6257306	0.0224860	0.356961	0.3196489
2022-10-07	142.5400	143.1000	139.4500	140.0900	85925600	138.55484	-0.0367187	2022	0.9100	0.0064958	0.6495824	0.0224860	0.356961	0.3196489
2022-10-10	140.4200	141.8900	138.5700	140.4200	74899000	138.88123	0.0023556	2022	0.9100	0.0064806	0.6480558	0.0224860	0.356961	0.3196489
2022-10-11	139.9000	141.3500	138.2200	138.9800	77033700	137.45699	-0.0102550	2022	0.9100	0.0065477	0.6547705	0.0224860	0.356961	0.3196489
2022-10-12	139.1300	140.3600	138.1600	138.3400	70433700	136.82401	-0.0046050	2022	0.9100	0.0065780	0.6577996	0.0224860	0.356961	0.3196489
2022-10-13	134.9900	143.5900	134.3700	142.9900	113224000	141.42307	0.0336129	2022	0.9100	0.0063641	0.6364081	0.0224860	0.356961	0.3196489
2022-10-14	144.3100	144.5200	138.1900	138.3800	88598000	136.86359	-0.0322400	2022	0.9100	0.0065761	0.6576095	0.0224860	0.356961	0.3196489
2022-10-17	141.0700	142.9000	140.2700	142.4100	85250900	140.84943	0.0291227	2022	0.9100	0.0063900	0.6390001	0.0224860	0.356961	0.3196489
2022-10-18	145.4900	146.7000	140.6100	143.7500	99136600	142.17473	0.0094094	2022	0.9100	0.0063304	0.6330435	0.0224860	0.356961	0.3196489
2022-10-19	141.6900	144.9500	141.5000	143.8600	61758300	142.28349	0.0007652	2022	0.9100	0.0063256	0.6325594	0.0224860	0.356961	0.3196489
2022-10-20	143.0200	145.8900	142.6500	143.3900	64522000	41.81868	-0.0032671	2022	0.9100	0.0063463	0.6346328	0.0224860	0.356961	0.3196489
2022-10-21	142.8700	147.8500	142.6500	147.2700	86548600	145.65610	0.0270591	2022	0.9100	0.0061791	0.6179127	0.0224860	0.356961	0.3196489
2022-10-24	147.1900	150.2300	146.0000	149.4500	75981900	47.81226	0.0148027	2022	0.9100	0.0060890	0.6088993	0.0224860	0.356961	0.3196489
2022-10-25	150.0900	152.4900	149.3600	152.3400	74732300	50.67059	0.0193376	2022	0.9100	0.0059735	0.5973481	0.0224860	0.356961	0.3196489
2022-10-26	150.9600	151.9900	148.0400	149.3500	88194300	47.71338	-0.0196271	2022	0.9100	0.0060931	0.6093070	0.0224860	0.356961	0.3196489
2022-10-27	148.0700	149.0500	144.1300	144.8000	109180200	43.21321	-0.0304654	2022	0.9100	0.0062845	0.6284530	0.0224860	0.356961	0.3196489
2022-10-28	148.2000	157.5000	147.8200	155.7400	164762400	54.03334	0.0755525	2022	0.9100	0.0058431	0.5843072	0.0224860	0.356961	0.3196489
2022-10-31	153.1600	154.2400	151.9200	153.3400	97943200	51.65964	-0.0154104	2022	0.9100	0.0059345	0.5934525	0.0224860	0.356961	0.3196489
2022-11-01	155.0800	155.4500	149.1300	150.6500	80379300	48.99910	-0.0175427	2022	0.9100	0.0060405	0.6040491	0.0224860	0.356961	0.3196489
2022-11-02	148.9500	152.1700	145.0000	145.0300	93604600	43.44070	-0.0373050	2022	0.9100	0.0062746	0.6274564	0.0224860	0.356961	0.3196489
2022-11-03	142.0600	142.8000	138.7500	138.8800	97918500	37.35812	-0.0424050	2022	0.9100	0.0065524	0.6552419	0.0224860	0.356961	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2022-11-04	142.090	142.670	134.380	138.3800	40814800	137.09062	-0.0036002	2022	0.9100	0.0065761	0.6576095	0.0224860	0.356961	0.3196489
2022-11-07	137.110	139.150	135.670	138.9200	83374600	137.62556	0.0039022	2022	0.9100	0.0065505	0.6550533	0.0224860	0.356961	0.3196489
2022-11-08	140.410	141.430	137.490	139.5000	89908500	138.20016	0.0041751	2022	0.9100	0.0065233	0.6523297	0.0224860	0.356961	0.3196489
2022-11-09	138.500	138.550	134.590	134.8700	74917800	133.61333	-0.0331900	2022	0.9100	0.0067472	0.6747238	0.0224860	0.356961	0.3196489
2022-11-10	141.240	146.870	139.500	146.8700	118854000	145.50153	0.0889746	2022	0.9100	0.0061960	0.6195956	0.0224860	0.356961	0.3196489
2022-11-11	145.820	150.010	144.370	149.7000	93979700	148.30511	0.0192688	2022	0.9100	0.0060788	0.6078824	0.0224860	0.356961	0.3196489
2022-11-14	148.970	150.280	147.430	148.2800	73374100	146.89835	-0.0094856	2022	0.9100	0.0061370	0.6137038	0.0224860	0.356961	0.3196489
2022-11-15	152.220	153.590	148.560	150.0400	89868300	148.64197	0.0118694	2022	0.9100	0.0060650	0.6065050	0.0224860	0.356961	0.3196489
2022-11-16	149.130	149.870	147.290	148.7900	64218300	147.40359	-0.0083311	2022	0.9100	0.0061160	0.6116003	0.0224860	0.356961	0.3196489
2022-11-17	146.430	151.480	146.150	150.7200	80389400	149.31561	0.0129714	2022	0.9100	0.0060377	0.6037686	0.0224860	0.356961	0.3196489
2022-11-18	152.310	152.700	149.970	151.2900	74829600	149.88033	0.0037818	2022	0.9100	0.0060149	0.6014938	0.0224860	0.356961	0.3196489
2022-11-21	150.160	150.370	147.720	148.0100	58724100	146.63089	-0.0216802	2022	0.9100	0.0061482	0.6148233	0.0224860	0.356961	0.3196489
2022-11-22	148.130	150.420	146.930	150.1800	51804100	148.78064	0.0146612	2022	0.9100	0.0060594	0.6059396	0.0224860	0.356961	0.3196489
2022-11-23	149.450	151.830	149.340	151.0700	58830140	149.66237	0.0059263	2022	0.9100	0.0060237	0.6023697	0.0224860	0.356961	0.3196489
2022-11-25	148.310	148.880	147.120	148.1100	35195900	146.72995	-0.0195936	2022	0.9100	0.0061441	0.6144082	0.0224860	0.356961	0.3196489
2022-11-28	145.140	146.640	143.380	144.2200	69246000	142.87621	-0.0262643	2022	0.9100	0.0063098	0.6309804	0.0224860	0.356961	0.3196489
2022-11-29	144.290	144.810	140.350	141.1700	83763800	139.85460	-0.0211483	2022	0.9100	0.0064461	0.6446129	0.0224860	0.356961	0.3196489
2022-11-30	141.400	148.720	140.550	148.0300	111380900	146.65070	0.0485939	2022	0.9100	0.0061474	0.6147403	0.0224860	0.356961	0.3196489
2022-12-01	148.210	149.130	146.610	148.3100	71250400	146.92810	0.0018915	2022	0.9100	0.0061358	0.6135797	0.0224860	0.356961	0.3196489
2022-12-02	145.960	148.000	145.650	147.8100	65447400	146.43277	-0.0033713	2022	0.9100	0.0061566	0.6156552	0.0224860	0.356961	0.3196489
2022-12-05	147.770	150.920	145.770	146.6300	68826400	145.26376	-0.0079832	2022	0.9100	0.0062061	0.6206097	0.0224860	0.356961	0.3196489
2022-12-06	147.070	147.300	141.920	142.9100	64727200	141.57840	-0.0253700	2022	0.9100	0.0063676	0.6367644	0.0224860	0.356961	0.3196489
2022-12-07	142.190	143.370	140.000	140.9400	69721100	139.62675	-0.0137849	2022	0.9100	0.0064566	0.6456648	0.0224860	0.356961	0.3196489
2022-12-08	142.360	143.520	141.100	142.6500	62128300	141.32083	0.0121328	2022	0.9100	0.0063793	0.6379250	0.0224860	0.356961	0.3196489
2022-12-09	142.340	145.570	140.900	142.1600	76097000	140.83539	-0.0034349	2022	0.9100	0.0064012	0.6401238	0.0224860	0.356961	0.3196489
2022-12-12	142.700	144.500	141.060	144.4900	70462700	143.14368	0.0163900	2022	0.9100	0.0062980	0.6298013	0.0224860	0.356961	0.3196489
2022-12-13	149.500	149.970	144.240	145.4700	93886200	144.11456	0.0067824	2022	0.9100	0.0062556	0.6255585	0.0224860	0.356961	0.3196489
2022-12-14	145.350	146.660	141.160	143.2100	82291200	141.87561	-0.0155358	2022	0.9100	0.0063543	0.6354305	0.0224860	0.356961	0.3196489
2022-12-15	141.110	141.800	136.030	136.5000	98931900	135.22813	-0.0468543	2022	0.9100	0.0066667	0.6666667	0.0224860	0.356961	0.3196489
2022-12-16	136.690	137.650	133.730	134.5100	160156900	133.25667	-0.0145788	2022	0.9100	0.0067653	0.6765297	0.0224860	0.356961	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2022-12-19	135.110	135.200	131.320	132.370	7959260	131.13660	-0.0159096	2022	0.9100	0.0068747	0.6874670	0.022486	0.356961	0.3196489
2022-12-20	131.390	133.250	129.890	132.300	7743280	131.06725	-0.0005288	2022	0.9100	0.0068783	0.6878307	0.022486	0.356961	0.3196489
2022-12-21	132.980	136.810	132.750	135.450	8592800	134.18791	0.0238095	2022	0.9100	0.0067183	0.6718346	0.022486	0.356961	0.3196489
2022-12-22	134.350	134.560	130.300	132.230	7785210	130.99791	-0.0237726	2022	0.9100	0.0068819	0.6881948	0.022486	0.356961	0.3196489
2022-12-23	130.920	132.420	129.640	131.860	6381490	130.63135	-0.0027981	2022	0.9100	0.0069013	0.6901259	0.022486	0.356961	0.3196489
2022-12-27	131.380	131.410	128.720	130.030	6900780	128.81842	-0.0138784	2022	0.9100	0.0069984	0.6998385	0.022486	0.356961	0.3196489
2022-12-28	129.670	131.030	125.870	126.040	8543840	124.86559	-0.0306852	2022	0.9100	0.0072199	0.7219930	0.022486	0.356961	0.3196489
2022-12-29	127.990	130.480	127.730	129.610	7570370	128.40233	0.0283243	2022	0.9100	0.0070211	0.7021063	0.022486	0.356961	0.3196489
2022-12-30	128.410	129.950	127.430	129.930	7703420	128.71935	0.0024689	2022	0.9100	0.0070038	0.7003772	0.022486	0.356961	0.3196489
2023-01-03	130.280	130.900	124.170	125.070	12117500	123.90462	-0.0374047	2023	0.9500	0.0075957	0.7595746	0.012783	0.202928	0.3196489
2023-01-04	126.890	128.660	125.080	126.360	8911360	125.18262	0.0103142	2023	0.9500	0.0075182	0.7518202	0.012783	0.202928	0.3196489
2023-01-05	127.130	127.770	124.760	125.020	8096270	123.85509	-0.0106047	2023	0.9500	0.0075988	0.7598784	0.012783	0.202928	0.3196489
2023-01-06	126.010	130.290	124.890	129.620	8775470	128.41223	0.0367941	2023	0.9500	0.0073291	0.7329116	0.012783	0.202928	0.3196489
2023-01-09	130.470	133.410	129.890	130.150	7079080	128.93731	0.0040889	2023	0.9500	0.0072993	0.7299270	0.012783	0.202928	0.3196489
2023-01-10	130.260	131.260	128.120	130.730	6389620	129.51190	0.0044564	2023	0.9500	0.0072669	0.7266886	0.012783	0.202928	0.3196489
2023-01-11	131.250	133.510	130.460	133.490	6945890	132.24620	0.0211123	2023	0.9500	0.0071166	0.7116638	0.012783	0.202928	0.3196489
2023-01-12	133.880	134.260	131.440	133.410	7137960	132.16695	-0.0005993	2023	0.9500	0.0071209	0.7120905	0.012783	0.202928	0.3196489
2023-01-13	132.030	134.920	131.660	134.760	5780970	133.50433	0.0101191	2023	0.9500	0.0070496	0.7049570	0.012783	0.202928	0.3196489
2023-01-17	134.830	137.290	134.130	135.940	6364660	134.67334	0.0087564	2023	0.9500	0.0069884	0.6988377	0.012783	0.202928	0.3196489
2023-01-18	136.820	138.610	135.030	135.210	6967280	133.95015	-0.0053700	2023	0.9500	0.0070261	0.7026107	0.012783	0.202928	0.3196489
2023-01-19	134.080	136.250	133.770	135.270	5828040	134.00960	0.0004437	2023	0.9500	0.0070230	0.7022991	0.012783	0.202928	0.3196489
2023-01-20	135.280	138.020	134.220	137.870	8022360	136.58537	0.0192207	2023	0.9500	0.0068905	0.6890549	0.012783	0.202928	0.3196489
2023-01-23	138.120	143.320	137.900	141.110	8176030	139.79518	0.0235004	2023	0.9500	0.0067323	0.6732336	0.012783	0.202928	0.3196489
2023-01-24	140.310	143.160	140.300	142.530	6643510	141.20195	0.0100631	2023	0.9500	0.0066653	0.6665264	0.012783	0.202928	0.3196489
2023-01-25	140.890	142.430	138.810	141.860	6579930	140.53818	-0.0047008	2023	0.9500	0.0066967	0.6696743	0.012783	0.202928	0.3196489
2023-01-26	143.170	144.250	141.900	143.960	5410510	142.61860	0.0148034	2023	0.9500	0.0065991	0.6599055	0.012783	0.202928	0.3196489
2023-01-27	143.160	147.230	143.080	145.930	7055580	144.57024	0.0136843	2023	0.9500	0.0065100	0.6509971	0.012783	0.202928	0.3196489
2023-01-30	144.960	145.550	142.850	143.000	6401530	141.66757	-0.0200781	2023	0.9500	0.0066434	0.6643357	0.012783	0.202928	0.3196489
2023-01-31	142.700	144.340	142.280	144.290	6587450	142.94554	0.0090209	2023	0.9500	0.0065840	0.6583963	0.012783	0.202928	0.3196489
2023-02-01	143.970	146.610	141.320	145.430	7766360	144.07491	0.0079008	2023	0.9500	0.0065324	0.6532353	0.012783	0.202928	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	sent_returns	volatility	volatility_avg
2023-02-02	148.900	151.180	148.170	150.820	18339000	149.41470	0.0370626	2023	0.9500	0.0062989	0.6298899	0.0127838	0.2029280	0.3196489
2023-02-03	148.030	157.380	147.830	154.500	154357300	153.06041	0.0243999	2023	0.9500	0.0061489	0.6148867	0.0127838	0.2029280	0.3196489
2023-02-06	152.570	153.100	150.780	151.730	69858300	150.31622	-0.0179288	2023	0.9500	0.0062611	0.6261122	0.0127838	0.2029280	0.3196489
2023-02-07	150.640	155.230	150.640	154.650	83322600	153.20898	0.0192447	2023	0.9500	0.0061429	0.6142904	0.0127838	0.2029280	0.3196489
2023-02-08	153.880	154.580	151.170	151.920	64120100	150.50446	-0.0176527	2023	0.9500	0.0062533	0.6253291	0.0127838	0.2029280	0.3196489
2023-02-09	153.780	154.330	150.420	150.870	56600710	149.46420	-0.0069116	2023	0.9500	0.0062968	0.6296812	0.0127838	0.2029280	0.3196489
2023-02-10	149.460	151.340	149.220	151.010	57745070	149.83134	0.0009279	2023	0.9500	0.0062910	0.6290974	0.0127838	0.2029280	0.3196489
2023-02-13	150.950	154.260	150.920	153.850	62199000	152.64919	0.0188068	2023	0.9500	0.0061748	0.6174845	0.0127838	0.2029280	0.3196489
2023-02-14	152.120	153.770	150.860	153.200	61707600	152.00424	-0.0042250	2023	0.9500	0.0062010	0.6201045	0.0127838	0.2029280	0.3196489
2023-02-15	153.110	155.500	152.880	155.330	65573800	154.11760	0.0139034	2023	0.9500	0.0061160	0.6116011	0.0127838	0.2029280	0.3196489
2023-02-16	153.510	156.330	153.350	153.710	68167900	152.51028	-0.0104294	2023	0.9500	0.0061805	0.6180469	0.0127838	0.2029280	0.3196489
2023-02-17	152.350	153.000	150.850	152.550	59144100	151.35933	-0.0075467	2023	0.9500	0.0062275	0.6227466	0.0127838	0.2029280	0.3196489
2023-02-21	150.200	151.300	148.410	148.480	58867200	147.32109	-0.0266798	2023	0.9500	0.0063982	0.6398168	0.0127838	0.2029280	0.3196489
2023-02-22	148.870	149.950	147.160	148.910	51011300	147.74776	0.0028961	2023	0.9500	0.0063797	0.6379692	0.0127838	0.2029280	0.3196489
2023-02-23	150.090	150.340	147.240	149.400	48394200	148.23392	0.0032905	2023	0.9500	0.0063588	0.6358769	0.0127838	0.2029280	0.3196489
2023-02-24	147.110	147.190	145.720	146.710	55469600	145.56493	-0.0180053	2023	0.9500	0.0064754	0.6475359	0.0127838	0.2029280	0.3196489
2023-02-27	147.710	149.170	147.450	147.920	44998500	146.76540	0.0082475	2023	0.9500	0.0064224	0.6422391	0.0127838	0.2029280	0.3196489
2023-02-28	147.050	149.080	146.830	147.410	50547000	146.25943	-0.0034478	2023	0.9500	0.0064446	0.6444610	0.0127838	0.2029280	0.3196489
2023-03-01	146.830	147.230	145.010	145.310	55479000	144.17581	-0.0142460	2023	0.9500	0.0065377	0.6537747	0.0127838	0.2029280	0.3196489
2023-03-02	144.380	146.710	143.900	145.910	52238100	144.77115	0.0041291	2023	0.9500	0.0065109	0.6510863	0.0127838	0.2029280	0.3196489
2023-03-03	148.040	151.110	147.330	151.030	70732300	149.85120	0.0350901	2023	0.9500	0.0062901	0.6290141	0.0127838	0.2029280	0.3196489
2023-03-06	153.790	156.300	153.460	153.830	87558000	152.62933	0.0185394	2023	0.9500	0.0061756	0.6175648	0.0127838	0.2029280	0.3196489
2023-03-07	153.700	154.030	151.130	151.600	56182000	150.41675	-0.0144965	2023	0.9500	0.0062665	0.6266491	0.0127838	0.2029280	0.3196489
2023-03-08	152.810	153.470	151.830	152.870	47204800	151.67683	0.0083772	2023	0.9500	0.0062144	0.6214431	0.0127838	0.2029280	0.3196489
2023-03-09	153.560	154.540	50.230	50.590	53833600	149.41463	-0.0149146	2023	0.9500	0.0063085	0.6308520	0.0127838	0.2029280	0.3196489
2023-03-10	150.210	150.940	147.610	148.500	68577240	147.34094	-0.0138787	2023	0.9500	0.0063973	0.6397306	0.0127838	0.2029280	0.3196489
2023-03-13	147.810	153.140	147.700	150.470	84457100	149.29553	0.0132660	2023	0.9500	0.0063136	0.6313551	0.0127838	0.2029280	0.3196489
2023-03-14	151.280	153.400	150.100	152.590	73695900	151.39902	0.0140892	2023	0.9500	0.0062258	0.6225834	0.0127838	0.2029280	0.3196489
2023-03-15	151.190	153.250	149.920	152.990	77167900	151.79590	0.0026215	2023	0.9500	0.0062096	0.6209556	0.0127838	0.2029280	0.3196489
2023-03-16	152.160	156.460	151.640	155.850	76161100	154.63358	0.0186940	2023	0.9500	0.0060956	0.6095605	0.0127838	0.2029280	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	sentreturns	volatility	volatility_avg
2023-03-17	156.080	156.740	154.280	155.000	9894460	153.79021	-0.0054540	2023	0.9500	0.0061290	0.6129032	0.0127838	0.2029280	0.3196489
2023-03-20	155.070	157.820	154.150	157.400	7364140	156.17146	0.0154838	2023	0.9500	0.0060356	0.6035578	0.0127838	0.2029280	0.3196489
2023-03-21	157.320	159.400	156.540	159.280	7393830	158.03679	0.0119441	2023	0.9500	0.0059643	0.5964340	0.0127838	0.2029280	0.3196489
2023-03-22	159.300	162.140	157.810	157.830	7570180	156.59813	-0.0091034	2023	0.9500	0.0060191	0.6019134	0.0127838	0.2029280	0.3196489
2023-03-23	158.830	161.550	157.680	158.930	6762210	157.68953	0.0069695	2023	0.9500	0.0059775	0.5977475	0.0127838	0.2029280	0.3196489
2023-03-24	158.860	160.340	157.850	160.250	5919650	158.99922	0.0083056	2023	0.9500	0.0059282	0.5928237	0.0127838	0.2029280	0.3196489
2023-03-27	159.940	160.770	157.870	158.280	5239030	157.04460	-0.0122933	2023	0.9500	0.0060020	0.6002022	0.0127838	0.2029280	0.3196489
2023-03-28	157.970	158.490	155.980	157.650	4599220	156.41953	-0.0039803	2023	0.9500	0.0060260	0.6026007	0.0127838	0.2029280	0.3196489
2023-03-29	159.370	161.050	159.350	160.770	5130570	159.51518	0.0197907	2023	0.9500	0.0059091	0.5909062	0.0127838	0.2029280	0.3196489
2023-03-30	161.530	162.470	161.270	162.360	4950170	161.09274	0.0098899	2023	0.9500	0.0058512	0.5851195	0.0127838	0.2029280	0.3196489
2023-03-31	162.440	165.000	161.910	164.900	6874980	163.61291	0.0156442	2023	0.9500	0.0057611	0.5761068	0.0127838	0.2029280	0.3196489
2023-04-03	164.270	166.290	164.220	166.170	5697620	164.87303	0.0077017	2023	0.9500	0.0057170	0.5717037	0.0127838	0.2029280	0.3196489
2023-04-04	166.600	166.840	165.110	165.630	4627830	164.33722	-0.0032496	2023	0.9500	0.0057357	0.5735676	0.0127838	0.2029280	0.3196489
2023-04-05	164.740	165.050	161.800	163.760	5151170	162.48183	-0.0112903	2023	0.9500	0.0058012	0.5801173	0.0127838	0.2029280	0.3196489
2023-04-06	162.430	164.960	162.000	164.660	4539010	163.37482	0.0054959	2023	0.9500	0.0057695	0.5769464	0.0127838	0.2029280	0.3196489
2023-04-10	161.420	162.030	160.080	162.030	4771690	160.76537	-0.0159723	2023	0.9500	0.0058631	0.5863112	0.0127838	0.2029280	0.3196489
2023-04-11	162.350	162.360	160.510	160.800	4764420	159.54494	-0.0075912	2023	0.9500	0.0059080	0.5907960	0.0127838	0.2029280	0.3196489
2023-04-12	161.220	162.060	159.780	160.100	5013310	158.85040	-0.0043532	2023	0.9500	0.0059338	0.5933791	0.0127838	0.2029280	0.3196489
2023-04-13	161.630	165.800	161.420	165.560	6844560	164.26776	0.0341036	2023	0.9500	0.0057381	0.5738101	0.0127838	0.2029280	0.3196489
2023-04-14	164.590	166.320	163.820	165.210	4938650	163.92052	-0.0021140	2023	0.9500	0.0057503	0.5750257	0.0127838	0.2029280	0.3196489
2023-04-17	165.090	165.390	164.030	165.230	4151620	163.94035	-0.0001210	2023	0.9500	0.0057496	0.5749561	0.0127838	0.2029280	0.3196489
2023-04-18	166.100	167.410	165.650	166.470	4992300	165.17068	0.0075047	2023	0.9500	0.0057067	0.5706734	0.0127838	0.2029280	0.3196489
2023-04-19	165.800	168.160	165.540	167.630	4772020	166.32164	0.0069682	2023	0.9500	0.0056672	0.5667243	0.0127838	0.2029280	0.3196489
2023-04-20	166.090	167.870	165.560	166.650	5245640	165.34926	-0.0058463	2023	0.9500	0.0057006	0.5700570	0.0127838	0.2029280	0.3196489
2023-04-21	165.050	166.450	164.490	165.020	5833730	163.73199	-0.0097809	2023	0.9500	0.0057569	0.5756878	0.0127838	0.2029280	0.3196489
2023-04-24	165.000	165.600	163.890	165.330	4194960	164.03958	0.0018785	2023	0.9500	0.0057461	0.5746084	0.0127838	0.2029280	0.3196489
2023-04-25	165.190	166.310	163.730	163.770	4871410	162.49175	-0.0094357	2023	0.9500	0.0058008	0.5800818	0.0127838	0.2029280	0.3196489
2023-04-26	163.060	165.280	162.800	163.760	4549880	162.48183	-0.0000611	2023	0.9500	0.0058012	0.5801173	0.0127838	0.2029280	0.3196489
2023-04-27	165.190	168.560	165.190	168.410	6490230	167.09554	0.0283953	2023	0.9500	0.0056410	0.5640995	0.0127838	0.2029280	0.3196489
2023-04-28	168.490	169.850	167.880	169.680	6520920	168.35561	0.0075411	2023	0.9500	0.0055988	0.5598774	0.0127838	0.2029280	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2023-05-01	169.2800	170.4500	168.6400	169.5900	52472900	168.26631	-0.0005304	2023	0.9500	0.0056010	0.5601746	0.012783	0.202928	0.3196489
2023-05-02	170.0900	170.3500	167.5400	168.5400	48425700	167.22450	-0.0061914	2023	0.9500	0.0056366	0.5636644	0.012783	0.202928	0.3196489
2023-05-03	169.5000	170.9200	167.1600	167.4500	65136000	166.14304	-0.0064673	2023	0.9500	0.0056733	0.5673335	0.012783	0.202928	0.3196489
2023-05-04	164.8900	167.0400	164.3100	165.7900	81235400	164.49597	-0.0099134	2023	0.9500	0.0057301	0.5730141	0.012783	0.202928	0.3196489
2023-05-05	170.9800	174.3000	170.7600	173.5700	113316400	172.21529	0.0469269	2023	0.9500	0.0054733	0.5473296	0.012783	0.202928	0.3196489
2023-05-08	172.4800	173.8500	172.1100	173.5000	55962800	172.14583	-0.0004033	2023	0.9500	0.0054755	0.5475504	0.012783	0.202928	0.3196489
2023-05-09	173.0500	173.5400	171.6000	171.7700	45326900	170.42932	-0.0099712	2023	0.9500	0.0055307	0.5530651	0.012783	0.202928	0.3196489
2023-05-10	173.0200	174.0300	171.9000	173.5600	53724500	172.20535	0.0104209	2023	0.9500	0.0054736	0.5473612	0.012783	0.202928	0.3196489
2023-05-11	173.8500	174.5900	172.1700	173.7500	49514700	172.39386	0.0010947	2023	0.9500	0.0054676	0.5467626	0.012783	0.202928	0.3196489
2023-05-12	173.6200	174.0600	171.0000	172.5700	45497800	171.45992	-0.0067913	2023	0.9500	0.0055050	0.5505012	0.012783	0.202928	0.3196489
2023-05-15	173.1600	173.2100	171.4700	172.0700	37266700	170.96313	-0.0028974	2023	0.9500	0.0055210	0.5521009	0.012783	0.202928	0.3196489
2023-05-16	171.9900	173.1400	171.8000	172.0700	42110300	170.96313	0.0000000	2023	0.9500	0.0055210	0.5521009	0.012783	0.202928	0.3196489
2023-05-17	171.7100	172.9300	170.4200	172.6900	57951600	171.57913	0.0036032	2023	0.9500	0.0055012	0.5501187	0.012783	0.202928	0.3196489
2023-05-18	173.0000	175.2400	172.5800	175.0500	65549700	173.92397	0.0136661	2023	0.9500	0.0054270	0.5427021	0.012783	0.202928	0.3196489
2023-05-19	176.3900	176.3900	174.9400	175.1600	55577240	174.03326	0.0006284	2023	0.9500	0.0054236	0.5423613	0.012783	0.202928	0.3196489
2023-05-22	173.9800	174.7100	173.4500	174.2000	43570900	173.07941	-0.0054807	2023	0.9500	0.0054535	0.5453502	0.012783	0.202928	0.3196489
2023-05-23	173.1300	173.3800	171.2800	171.5600	50747300	170.45641	-0.0151550	2023	0.9500	0.0055374	0.5537421	0.012783	0.202928	0.3196489
2023-05-24	171.0900	172.4200	170.5200	171.8400	45145300	170.73459	0.0016321	2023	0.9500	0.0055284	0.5528399	0.012783	0.202928	0.3196489
2023-05-25	172.4100	173.9000	171.6900	172.9900	56058300	171.87721	0.0066923	2023	0.9500	0.0054916	0.5491647	0.012783	0.202928	0.3196489
2023-05-26	173.3200	175.7700	173.1100	175.4300	54835000	174.30148	0.0141048	2023	0.9500	0.0054153	0.5415266	0.012783	0.202928	0.3196489
2023-05-30	176.9600	178.9900	176.5700	177.3000	55964400	176.15947	0.0106596	2023	0.9500	0.0053581	0.5358150	0.012783	0.202928	0.3196489
2023-05-31	177.3300	179.3500	176.7600	177.2500	99625300	176.10980	-0.0002820	2023	0.9500	0.0053597	0.5359661	0.012783	0.202928	0.3196489
2023-06-01	177.7000	180.1200	176.9300	180.0900	68901800	178.93152	0.0160225	2023	0.9500	0.0052751	0.5275140	0.012783	0.202928	0.3196489
2023-06-02	181.0300	181.7800	179.2600	180.9500	61945900	179.78600	0.0047754	2023	0.9500	0.0052501	0.5250069	0.012783	0.202928	0.3196489
2023-06-05	182.6300	184.9500	178.0400	179.5800	121946500	178.42482	-0.0075711	2023	0.9500	0.0052901	0.5290121	0.012783	0.202928	0.3196489
2023-06-06	179.9700	180.1200	177.4300	179.2100	64848400	178.05719	-0.0020603	2023	0.9500	0.0053010	0.5301043	0.012783	0.202928	0.3196489
2023-06-07	178.4400	181.2100	177.3200	177.8200	61944600	176.67613	-0.0077563	2023	0.9500	0.0053425	0.5342481	0.012783	0.202928	0.3196489
2023-06-08	177.9000	180.8400	177.4600	180.5700	50214900	179.40843	0.0154651	2023	0.9500	0.0052611	0.5261117	0.012783	0.202928	0.3196489
2023-06-09	181.5000	182.2300	180.6300	180.9600	48870700	179.79593	0.0021598	2023	0.9500	0.0052498	0.5249779	0.012783	0.202928	0.3196489
2023-06-12	181.2700	183.8900	180.9700	183.7900	54274900	182.60771	0.0156387	2023	0.9500	0.0051689	0.5168943	0.012783	0.202928	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	scaled_return	volatility	volatility_avg
2023-06-13	182.800	184.150	182.440	183.310	54929100	182.13081	-0.0026117	2023	0.9500	0.0051825	0.5182478	0.0127833	0.2029280	0.3196489
2023-06-14	183.370	184.390	182.020	183.950	57462900	182.76669	0.0034914	2023	0.9500	0.0051644	0.5164447	0.0127833	0.2029280	0.3196489
2023-06-15	183.960	186.520	183.780	186.010	65433200	184.81345	0.0111987	2023	0.9500	0.0051073	0.5107252	0.0127833	0.2029280	0.3196489
2023-06-16	186.730	186.990	184.270	184.920	101235600	183.73044	-0.0058599	2023	0.9500	0.0051374	0.5137357	0.0127833	0.2029280	0.3196489
2023-06-20	184.410	186.100	184.410	185.010	49799100	183.81987	0.0004867	2023	0.9500	0.0051349	0.5134858	0.0127833	0.2029280	0.3196489
2023-06-21	184.900	185.410	182.590	183.960	49515700	182.77664	-0.0056753	2023	0.9500	0.0051642	0.5164166	0.0127833	0.2029280	0.3196489
2023-06-22	183.740	187.050	183.670	187.000	51245300	185.79709	0.0165253	2023	0.9500	0.0050802	0.5080214	0.0127833	0.2029280	0.3196489
2023-06-23	185.550	187.560	185.010	186.680	53079300	185.47913	-0.0017113	2023	0.9500	0.0050889	0.5088922	0.0127833	0.2029280	0.3196489
2023-06-26	186.830	188.050	185.230	185.270	48088700	184.07822	-0.0075530	2023	0.9500	0.0051277	0.5127651	0.0127833	0.2029280	0.3196489
2023-06-27	185.890	188.390	185.670	188.060	50730800	186.85025	0.0150591	2023	0.9500	0.0050516	0.5051579	0.0127833	0.2029280	0.3196489
2023-06-28	187.930	189.900	187.600	189.250	51216800	188.03261	0.0063278	2023	0.9500	0.0050198	0.5019815	0.0127833	0.2029280	0.3196489
2023-06-29	189.080	190.070	188.940	189.590	46347300	188.37041	0.0017965	2023	0.9500	0.0050108	0.5010813	0.0127833	0.2029280	0.3196489
2023-06-30	191.630	194.480	191.260	193.970	85069600	192.72226	0.0231025	2023	0.9500	0.0048977	0.4897665	0.0127833	0.2029280	0.3196489
2023-07-03	193.780	193.880	191.760	192.460	31458200	191.22195	-0.0077847	2023	0.9500	0.0049361	0.4936090	0.0127833	0.2029280	0.3196489
2023-07-05	191.570	192.980	190.620	191.330	46920300	190.09923	-0.0058714	2023	0.9500	0.0049652	0.4965243	0.0127833	0.2029280	0.3196489
2023-07-06	189.840	192.020	189.200	191.810	45094300	190.57613	0.0025087	2023	0.9500	0.0049528	0.4952818	0.0127833	0.2029280	0.3196489
2023-07-07	191.410	192.670	190.240	190.680	46778000	189.45340	-0.0058913	2023	0.9500	0.0049822	0.4982169	0.0127833	0.2029280	0.3196489
2023-07-10	189.260	189.990	187.040	188.610	59922200	187.39671	-0.0108558	2023	0.9500	0.0050368	0.5036849	0.0127833	0.2029280	0.3196489
2023-07-11	189.160	189.300	186.600	188.080	46638100	186.87015	-0.0028100	2023	0.9500	0.0050510	0.5051042	0.0127833	0.2029280	0.3196489
2023-07-12	189.680	191.700	188.470	189.770	60750200	188.54926	0.0089856	2023	0.9500	0.0050061	0.5006060	0.0127833	0.2029280	0.3196489
2023-07-13	190.500	191.190	189.780	190.540	41342300	189.31429	0.0040575	2023	0.9500	0.0049858	0.4985830	0.0127833	0.2029280	0.3196489
2023-07-14	190.230	191.180	189.630	190.690	41573900	189.46333	0.0007873	2023	0.9500	0.0049819	0.4981908	0.0127833	0.2029280	0.3196489
2023-07-17	191.900	194.320	191.810	193.990	50520200	192.74210	0.0173056	2023	0.9500	0.0048972	0.4897160	0.0127833	0.2029280	0.3196489
2023-07-18	193.350	194.330	192.420	193.730	48353800	192.48376	-0.0013403	2023	0.9500	0.0049037	0.4903732	0.0127833	0.2029280	0.3196489
2023-07-19	193.100	198.230	192.650	195.100	80507300	193.84499	0.0070718	2023	0.9500	0.0048693	0.4869298	0.0127833	0.2029280	0.3196489
2023-07-20	195.090	196.470	192.500	193.130	59581200	191.88765	-0.0100974	2023	0.9500	0.0049190	0.4918966	0.0127833	0.2029280	0.3196489
2023-07-21	194.100	194.970	191.230	191.940	71917800	190.70531	-0.0061617	2023	0.9500	0.0049495	0.4949463	0.0127833	0.2029280	0.3196489
2023-07-24	193.410	194.910	192.250	192.750	45377800	191.51009	0.0042201	2023	0.9500	0.0049287	0.4928664	0.0127833	0.2029280	0.3196489
2023-07-25	193.330	194.440	192.920	193.620	37283200	192.37451	0.0045136	2023	0.9500	0.0049065	0.4906518	0.0127833	0.2029280	0.3196489
2023-07-26	193.670	195.640	193.320	194.500	47471900	193.24883	0.0045450	2023	0.9500	0.0048843	0.4884319	0.0127833	0.2029280	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2023-07-27	196.0200	197.2000	192.5500	193.2200	4746020	191.97707	-0.0065810	2023	0.9500	0.0049167	0.4916675	0.0127838	0.2029288	0.3196489
2023-07-28	194.6700	196.6300	194.1400	195.8300	4829140	194.57031	0.0135079	2023	0.9500	0.0048511	0.4851146	0.0127838	0.2029288	0.3196489
2023-07-31	196.0600	196.4900	195.2600	196.4500	3882410	195.18629	0.0031660	2023	0.9500	0.0048358	0.4835836	0.0127838	0.2029288	0.3196489
2023-08-01	196.2400	196.7300	195.2800	195.6100	3517510	194.35168	-0.0042759	2023	0.9500	0.0048566	0.4856602	0.0127838	0.2029288	0.3196489
2023-08-02	195.0400	195.1800	191.8500	192.5800	5038930	191.34117	-0.0154900	2023	0.9500	0.0049330	0.4933015	0.0127838	0.2029288	0.3196489
2023-08-03	191.5700	192.3700	190.6900	191.1700	6123520	189.94025	-0.0073217	2023	0.9500	0.0049694	0.4969399	0.0127838	0.2029288	0.3196489
2023-08-04	185.5200	187.3800	181.9200	181.9900	15799708	180.81931	-0.0480200	2023	0.9500	0.0052201	0.5220067	0.0127838	0.2029288	0.3196489
2023-08-07	182.1300	183.1300	177.3500	178.8500	9757610	177.69951	-0.0172537	2023	0.9500	0.0053117	0.5311714	0.0127838	0.2029288	0.3196489
2023-08-08	179.6900	180.2700	177.5800	179.8000	6782300	178.64337	0.0053117	2023	0.9500	0.0052836	0.5283648	0.0127838	0.2029288	0.3196489
2023-08-09	180.8700	180.9300	177.0100	178.1900	6037850	177.04375	-0.0089544	2023	0.9500	0.0053314	0.5331388	0.0127838	0.2029288	0.3196489
2023-08-10	179.4800	180.7500	177.6000	177.9700	5468690	176.82516	-0.0012346	2023	0.9500	0.0053380	0.5337978	0.0127838	0.2029288	0.3196489
2023-08-11	177.3200	178.6200	176.5500	177.7900	5198810	176.88487	-0.0010115	2023	0.9500	0.0053434	0.5343383	0.0127838	0.2029288	0.3196489
2023-08-14	177.9700	179.6900	177.3100	179.4600	4367560	178.54637	0.0093932	2023	0.9500	0.0052937	0.5293659	0.0127838	0.2029288	0.3196489
2023-08-15	178.8800	179.4800	177.0500	177.4500	4362260	176.54659	-0.0112003	2023	0.9500	0.0053536	0.5353621	0.0127838	0.2029288	0.3196489
2023-08-16	177.1300	178.5400	176.5000	176.5700	4696490	175.67108	-0.0049591	2023	0.9500	0.0053803	0.5380302	0.0127838	0.2029288	0.3196489
2023-08-17	177.1400	177.5100	173.4800	174.0000	6606290	173.11417	-0.0145552	2023	0.9500	0.0054598	0.5459770	0.0127838	0.2029288	0.3196489
2023-08-18	172.3000	175.1000	171.9600	174.4900	6111420	173.60167	0.0028161	2023	0.9500	0.0054444	0.5444438	0.0127838	0.2029288	0.3196489
2023-08-21	175.0700	176.1300	173.7400	175.8400	4631190	174.94478	0.0077368	2023	0.9500	0.0054026	0.5402639	0.0127838	0.2029288	0.3196489
2023-08-22	177.0600	177.6800	176.2500	177.2300	4208420	176.32770	0.0079049	2023	0.9500	0.0053603	0.5360266	0.0127838	0.2029288	0.3196489
2023-08-23	178.5200	181.5500	178.3300	181.1200	5272280	180.19791	0.0219489	2023	0.9500	0.0052451	0.5245141	0.0127838	0.2029288	0.3196489
2023-08-24	180.6700	181.1000	176.0100	176.3800	5494580	175.48203	-0.0261704	2023	0.9500	0.0053861	0.5386098	0.0127838	0.2029288	0.3196489
2023-08-25	177.3800	179.1500	175.8200	178.6100	5144960	177.70068	0.0126431	2023	0.9500	0.0053189	0.5318851	0.0127838	0.2029288	0.3196489
2023-08-28	180.0900	180.5900	178.5500	180.1900	4382070	179.27264	0.0088461	2023	0.9500	0.0052722	0.5272213	0.0127838	0.2029288	0.3196489
2023-08-29	179.7000	184.9000	179.5000	184.1200	5300390	183.18263	0.0218103	2023	0.9500	0.0051597	0.5159679	0.0127838	0.2029288	0.3196489
2023-08-30	184.9400	187.8500	184.7400	187.6500	6081390	186.69467	0.0191723	2023	0.9500	0.0050626	0.5062617	0.0127838	0.2029288	0.3196489
2023-08-31	187.8400	189.1200	187.4800	187.8700	6079450	186.91359	0.0011724	2023	0.9500	0.0050567	0.5056688	0.0127838	0.2029288	0.3196489
2023-09-01	189.4900	189.9200	188.2800	189.4600	4573260	188.49547	0.0084634	2023	0.9500	0.0050143	0.5014251	0.0127838	0.2029288	0.3196489
2023-09-05	188.2800	189.9800	187.6100	189.7000	4528000	188.73421	0.0012667	2023	0.9500	0.0050079	0.5007907	0.0127838	0.2029288	0.3196489
2023-09-06	188.4000	188.8500	181.4700	182.9100	8175580	181.97879	-0.0357933	2023	0.9500	0.0051938	0.5193811	0.0127838	0.2029288	0.3196489
2023-09-07	175.1800	178.2100	173.5400	177.5600	12488800	176.65604	-0.0292494	2023	0.9500	0.0053503	0.5350304	0.0127838	0.2029288	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	sentreturn	volatility	volatility_avg
2023-09-08	178.3500	180.2400	177.7900	178.1800	6555130	77.27286	0.0034917	2023	0.9500	0.0053317	0.5331687	0.0127838	0.2029280	0.3196489
2023-09-11	180.0700	180.3000	177.3400	179.3600	5895310	78.44687	0.0066226	2023	0.9500	0.0052966	0.5296610	0.0127838	0.2029280	0.3196489
2023-09-12	179.4900	180.1300	174.8200	176.3000	9037020	75.40244	-0.0170606	2023	0.9500	0.0053885	0.5388542	0.0127838	0.2029280	0.3196489
2023-09-13	176.5100	177.3000	173.9800	174.2100	8426790	73.32309	-0.0118548	2023	0.9500	0.0054532	0.5453188	0.0127838	0.2029280	0.3196489
2023-09-14	174.0000	176.1000	173.5800	175.7400	6089580	74.84532	0.0087825	2023	0.9500	0.0054057	0.5405713	0.0127838	0.2029280	0.3196489
2023-09-15	176.4800	176.5000	173.8200	175.0100	109205100	74.11900	-0.0041539	2023	0.9500	0.0054283	0.5428261	0.0127838	0.2029280	0.3196489
2023-09-18	176.4800	179.3800	176.1700	177.9700	67257600	77.06395	0.0169134	2023	0.9500	0.0053380	0.5337978	0.0127838	0.2029280	0.3196489
2023-09-19	177.5200	179.6300	177.1300	179.0700	51826900	78.15836	0.0061809	2023	0.9500	0.0053052	0.5305188	0.0127838	0.2029280	0.3196489
2023-09-20	179.2600	179.7000	175.4000	175.4900	58436200	74.59657	-0.0199922	2023	0.9500	0.0054134	0.5413414	0.0127838	0.2029280	0.3196489
2023-09-21	174.5500	176.3000	173.8600	173.9300	63047900	73.04451	-0.0088895	2023	0.9500	0.0054620	0.5461968	0.0127838	0.2029280	0.3196489
2023-09-22	174.6700	177.0800	174.0500	174.7900	56672540	73.90013	0.0049445	2023	0.9500	0.0054351	0.5435094	0.0127838	0.2029280	0.3196489
2023-09-25	174.2000	176.9700	174.1500	176.0800	46172700	75.18356	0.0073803	2023	0.9500	0.0053953	0.5395275	0.0127838	0.2029280	0.3196489
2023-09-26	174.8200	175.2000	171.6600	171.9600	64588900	71.08453	-0.0233984	2023	0.9500	0.0055245	0.5524540	0.0127838	0.2029280	0.3196489
2023-09-27	172.6200	173.0400	169.0500	170.4300	66921800	69.56233	-0.0088975	2023	0.9500	0.0055741	0.5574136	0.0127838	0.2029280	0.3196489
2023-09-28	169.3400	172.0300	167.6200	170.6900	56294400	69.82101	0.0015256	2023	0.9500	0.0055656	0.5565645	0.0127838	0.2029280	0.3196489
2023-09-29	172.0200	173.0700	170.3400	171.2100	51814200	70.33838	0.0030465	2023	0.9500	0.0055487	0.5548741	0.0127838	0.2029280	0.3196489
2023-10-02	171.2200	174.3000	170.9300	173.7500	52164500	72.86542	0.0148355	2023	0.9500	0.0054676	0.5467626	0.0127838	0.2029280	0.3196489
2023-10-03	172.2600	173.6300	170.8200	172.4000	49594600	71.52231	-0.0077698	2023	0.9500	0.0055104	0.5510441	0.0127838	0.2029280	0.3196489
2023-10-04	171.0900	174.2100	170.9700	173.6600	53020300	72.77589	0.0073086	2023	0.9500	0.0054705	0.5470459	0.0127838	0.2029280	0.3196489
2023-10-05	173.7900	175.4500	172.6800	174.9100	48527900	74.01953	0.0071980	2023	0.9500	0.0054314	0.5431365	0.0127838	0.2029280	0.3196489
2023-10-06	173.8000	177.9900	173.1800	177.4900	57224100	76.58640	0.0147505	2023	0.9500	0.0053524	0.5352414	0.0127838	0.2029280	0.3196489
2023-10-09	176.8100	179.0500	175.8000	178.9900	42390800	78.07877	0.0084512	2023	0.9500	0.0053076	0.5307559	0.0127838	0.2029280	0.3196489
2023-10-10	178.1000	179.7200	177.9500	178.3900	43698000	77.48181	-0.0033522	2023	0.9500	0.0053254	0.5325411	0.0127838	0.2029280	0.3196489
2023-10-11	178.2000	179.8500	177.6000	179.8000	47551100	78.88463	0.0079041	2023	0.9500	0.0052836	0.5283648	0.0127838	0.2029280	0.3196489
2023-10-12	180.0700	182.3400	179.0400	180.7100	56674100	79.78999	0.0050612	2023	0.9500	0.0052570	0.5257041	0.0127838	0.2029280	0.3196489
2023-10-13	181.4200	181.9300	178.1400	178.8500	51427100	77.93945	-0.0102927	2023	0.9500	0.0053117	0.5311714	0.0127838	0.2029280	0.3196489
2023-10-16	176.7500	179.0800	176.5100	178.7200	52517000	77.81012	-0.0007269	2023	0.9500	0.0053156	0.5315577	0.0127838	0.2029280	0.3196489
2023-10-17	176.6500	178.4200	174.8000	177.1500	57549400	76.24811	-0.0087847	2023	0.9500	0.0053627	0.5362687	0.0127838	0.2029280	0.3196489
2023-10-18	175.5800	177.5800	175.1100	175.8400	54764400	74.94478	-0.0073948	2023	0.9500	0.0054026	0.5402639	0.0127838	0.2029280	0.3196489
2023-10-19	176.0400	177.8400	175.1900	175.4600	59302900	74.56674	-0.0021610	2023	0.9500	0.0054143	0.5414339	0.0127838	0.2029280	0.3196489

Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	return	volatility	volatility_avg
2023-10-20	175.310	175.420	172.640	172.880	6418930	171.99986	-0.0147042	2023	0.9500	0.0054951	0.5495141	0.0127838	0.202928	0.3196489
2023-10-23	170.910	174.010	169.930	173.000	5598010	172.11925	0.0006941	2023	0.9500	0.0054913	0.5491329	0.0127838	0.202928	0.3196489
2023-10-24	173.050	173.670	171.450	173.440	4381660	172.55701	0.0025434	2023	0.9500	0.0054774	0.5477398	0.0127838	0.202928	0.3196489
2023-10-25	171.880	173.060	170.650	171.100	5715700	170.22893	-0.0134917	2023	0.9500	0.0055523	0.5552308	0.0127838	0.202928	0.3196489
2023-10-26	170.370	171.380	165.670	166.890	7062530	166.04036	-0.0246055	2023	0.9500	0.0056924	0.5692372	0.0127838	0.202928	0.3196489
2023-10-27	166.910	168.960	166.830	168.220	5849910	167.36359	0.0079693	2023	0.9500	0.0056474	0.5647367	0.0127838	0.202928	0.3196489
2023-10-30	169.020	171.170	168.870	170.290	5113100	169.42303	0.0123053	2023	0.9500	0.0055787	0.5578719	0.0127838	0.202928	0.3196489
2023-10-31	169.350	170.900	167.900	170.770	4484600	169.90062	0.0028188	2023	0.9500	0.0055630	0.5563038	0.0127838	0.202928	0.3196489
2023-11-01	171.000	174.230	170.120	173.970	5693490	173.08432	0.0187386	2023	0.9500	0.0054607	0.5460712	0.0127838	0.202928	0.3196489
2023-11-02	175.520	177.780	175.460	177.570	7733480	176.66599	0.0206933	2023	0.9500	0.0053500	0.5350003	0.0127838	0.202928	0.3196489
2023-11-03	174.240	176.820	173.350	176.650	7976370	175.75067	-0.0051811	2023	0.9500	0.0053779	0.5377866	0.0127838	0.202928	0.3196489
2023-11-06	176.380	179.430	176.210	179.230	6384130	178.31759	0.0146052	2023	0.9500	0.0053005	0.5300452	0.0127838	0.202928	0.3196489
2023-11-07	179.180	182.440	178.970	181.820	7053000	180.89435	0.0144508	2023	0.9500	0.0052249	0.5224948	0.0127838	0.202928	0.3196489
2023-11-08	182.350	183.450	181.590	182.890	4934030	181.95891	0.0058849	2023	0.9500	0.0051944	0.5194379	0.0127838	0.202928	0.3196489
2023-11-09	182.960	184.120	181.810	182.410	5376350	181.48134	-0.0026245	2023	0.9500	0.0052080	0.5208048	0.0127838	0.202928	0.3196489
2023-11-10	183.970	186.570	183.530	186.400	6613340	185.69536	0.0218737	2023	0.9500	0.0050966	0.5096567	0.0127838	0.202928	0.3196489
2023-11-13	185.820	186.030	184.210	184.800	4362750	184.10139	-0.0085836	2023	0.9500	0.0051407	0.5140693	0.0127838	0.202928	0.3196489
2023-11-14	187.700	188.110	186.300	187.440	6010840	186.73141	0.0142857	2023	0.9500	0.0050683	0.5068288	0.0127838	0.202928	0.3196489
2023-11-15	187.850	189.500	187.780	188.010	5379050	187.29927	0.0030409	2023	0.9500	0.0050529	0.5052923	0.0127838	0.202928	0.3196489
2023-11-16	189.570	190.960	188.650	189.710	5441290	188.99284	0.0090421	2023	0.9500	0.0050076	0.5007643	0.0127838	0.202928	0.3196489
2023-11-17	190.250	190.380	188.570	189.690	5092270	188.97290	-0.0001054	2023	0.9500	0.0050082	0.5008171	0.0127838	0.202928	0.3196489
2023-11-20	189.890	191.910	189.880	191.450	4650510	190.72626	0.0092783	2023	0.9500	0.0049621	0.4962131	0.0127838	0.202928	0.3196489
2023-11-21	191.410	191.520	189.740	190.640	3813450	189.91931	-0.0042309	2023	0.9500	0.0049832	0.4983214	0.0127838	0.202928	0.3196489
2023-11-22	191.490	192.930	190.830	191.310	3961770	190.58679	0.0035145	2023	0.9500	0.0049658	0.4965762	0.0127838	0.202928	0.3196489
2023-11-24	190.870	190.900	189.250	189.970	2404830	189.25185	-0.0070043	2023	0.9500	0.0050008	0.5000790	0.0127838	0.202928	0.3196489
2023-11-27	189.920	190.670	188.900	189.790	4055260	189.07253	-0.0009476	2023	0.9500	0.0050055	0.5005533	0.0127838	0.202928	0.3196489
2023-11-28	189.780	191.080	189.400	190.400	3841540	189.68021	0.0032141	2023	0.9500	0.0049895	0.4989496	0.0127838	0.202928	0.3196489
2023-11-29	190.900	192.090	188.970	189.370	4301420	188.65413	-0.0054097	2023	0.9500	0.0050166	0.5016634	0.0127838	0.202928	0.3196489
2023-11-30	189.840	190.320	188.190	189.950	4879440	189.23193	0.0030628	2023	0.9500	0.0050013	0.5001316	0.0127838	0.202928	0.3196489
2023-12-01	190.330	191.560	189.230	191.240	4567930	190.51706	0.0067913	2023	0.9500	0.0049676	0.4967580	0.0127838	0.202928	0.3196489

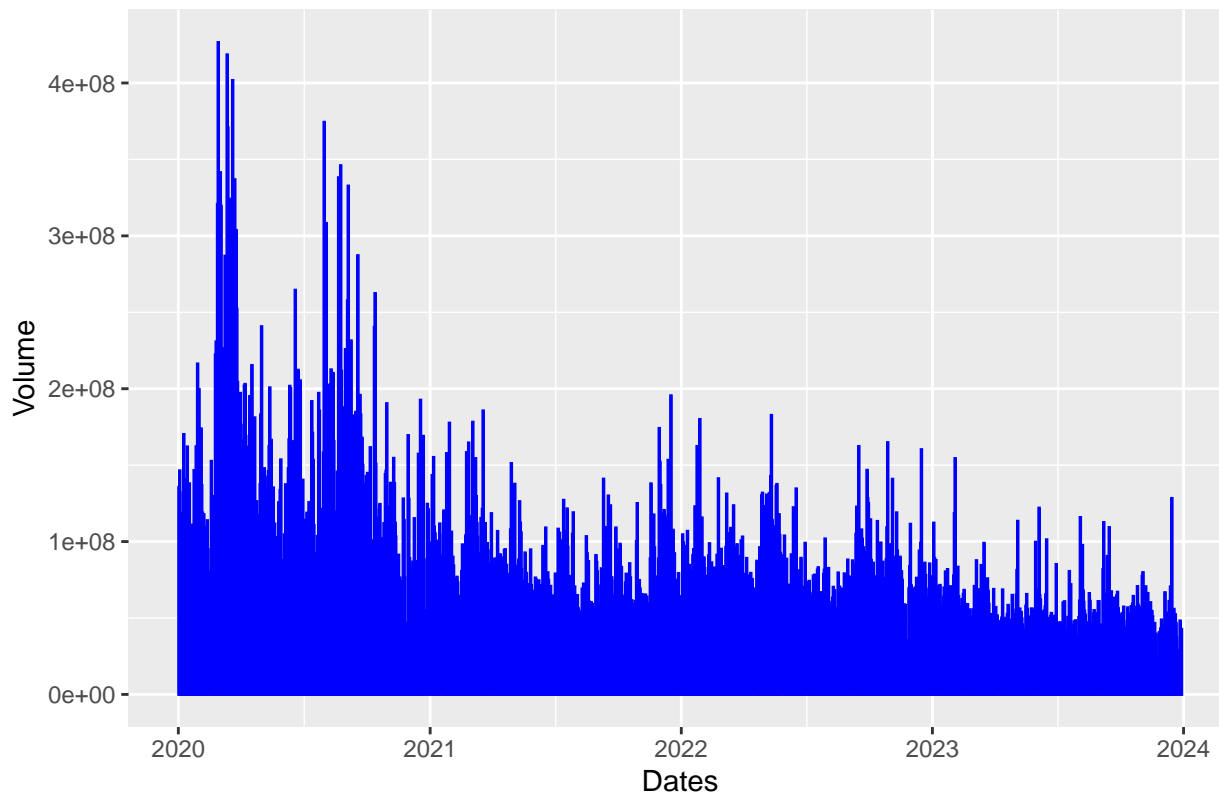| Dates	Open	High	Low	Close	Volume	Adjusted	daily.return	year	Dividend	div_yield	div_yield_percentage	sentreturn	volatility	volatility_avg
2023-12-04	189.980	190.050	187.450	189.430	43389500	188.71388	-0.0094646	2023	0.9500	0.0050150	0.5015045	0.0127838	0.202928	0.3196489
2023-12-05	190.210	194.400	190.180	193.420	66628400	192.68881	0.0210632	2023	0.9500	0.0049116	0.4911591	0.0127838	0.202928	0.3196489
2023-12-06	194.450	194.760	192.110	192.320	41089700	191.59297	-0.0056871	2023	0.9500	0.0049397	0.4939684	0.0127838	0.202928	0.3196489
2023-12-07	193.630	195.000	193.590	194.270	47477700	193.53560	0.0101393	2023	0.9500	0.0048901	0.4890101	0.0127838	0.202928	0.3196489
2023-12-08	194.200	195.990	193.670	195.710	53377300	194.97015	0.0074124	2023	0.9500	0.0048541	0.4854121	0.0127838	0.202928	0.3196489
2023-12-11	193.110	193.490	191.420	193.180	60943700	192.44971	-0.0129274	2023	0.9500	0.0049177	0.4917694	0.0127838	0.202928	0.3196489
2023-12-12	193.080	194.720	191.720	194.710	52696900	193.97395	0.0079201	2023	0.9500	0.0048791	0.4879051	0.0127838	0.202928	0.3196489
2023-12-13	195.090	198.000	194.850	197.960	70404200	197.21167	0.0166915	2023	0.9500	0.0047989	0.4798949	0.0127838	0.202928	0.3196489
2023-12-14	198.020	199.620	196.160	198.110	66831600	197.36108	0.0007577	2023	0.9500	0.0047953	0.4795316	0.0127838	0.202928	0.3196489
2023-12-15	197.530	198.400	197.000	197.570	128256700	196.82312	-0.0027257	2023	0.9500	0.0048084	0.4808422	0.0127838	0.202928	0.3196489
2023-12-18	196.090	196.630	194.390	195.890	55751900	195.14948	-0.0085034	2023	0.9500	0.0048497	0.4849661	0.0127838	0.202928	0.3196489
2023-12-19	196.160	196.950	195.890	196.940	40714100	196.19551	0.0053602	2023	0.9500	0.0048238	0.4823804	0.0127838	0.202928	0.3196489
2023-12-20	196.900	197.680	194.830	194.830	52244280	094.09349	-0.0107139	2023	0.9500	0.0048760	0.4876046	0.0127838	0.202928	0.3196489
2023-12-21	196.100	197.080	193.500	194.680	46482500	193.94403	-0.0007699	2023	0.9500	0.0048798	0.4879803	0.0127838	0.202928	0.3196489
2023-12-22	195.180	195.410	192.970	193.600	37122800	192.86813	-0.0055475	2023	0.9500	0.0049070	0.4907025	0.0127838	0.202928	0.3196489
2023-12-26	193.610	193.890	192.830	193.050	28919300	192.32022	-0.0028409	2023	0.9500	0.0049210	0.4921005	0.0127838	0.202928	0.3196489
2023-12-27	192.490	193.500	191.090	193.150	48087700	192.41983	0.0005180	2023	0.9500	0.0049185	0.4918457	0.0127838	0.202928	0.3196489
2023-12-28	194.140	194.660	193.170	193.580	34049900	192.84822	0.0022263	2023	0.9500	0.0049075	0.4907532	0.0127838	0.202928	0.3196489
2023-12-29	193.900	194.400	191.730	192.530	42628800	191.80219	-0.0054241	2023	0.9500	0.0049343	0.4934296	0.0127838	0.202928	0.3196489

```
stock_identity
```

```
## $Ticker
## [1] "AAPL"
##
## $Start_Date
## [1] "2020-01-01"
##
## $End_Date
## [1] "2024-01-01"
##
## $div_yield_percentage
## [1] 0.4934296
```

Volume

```
stock_df %>%
  ggplot() +
```

```
geom_col(aes(x = Dates, y = Volume), color = 'blue') +
theme_grey() +
ggtitle('Chart of Volume over Time')
```
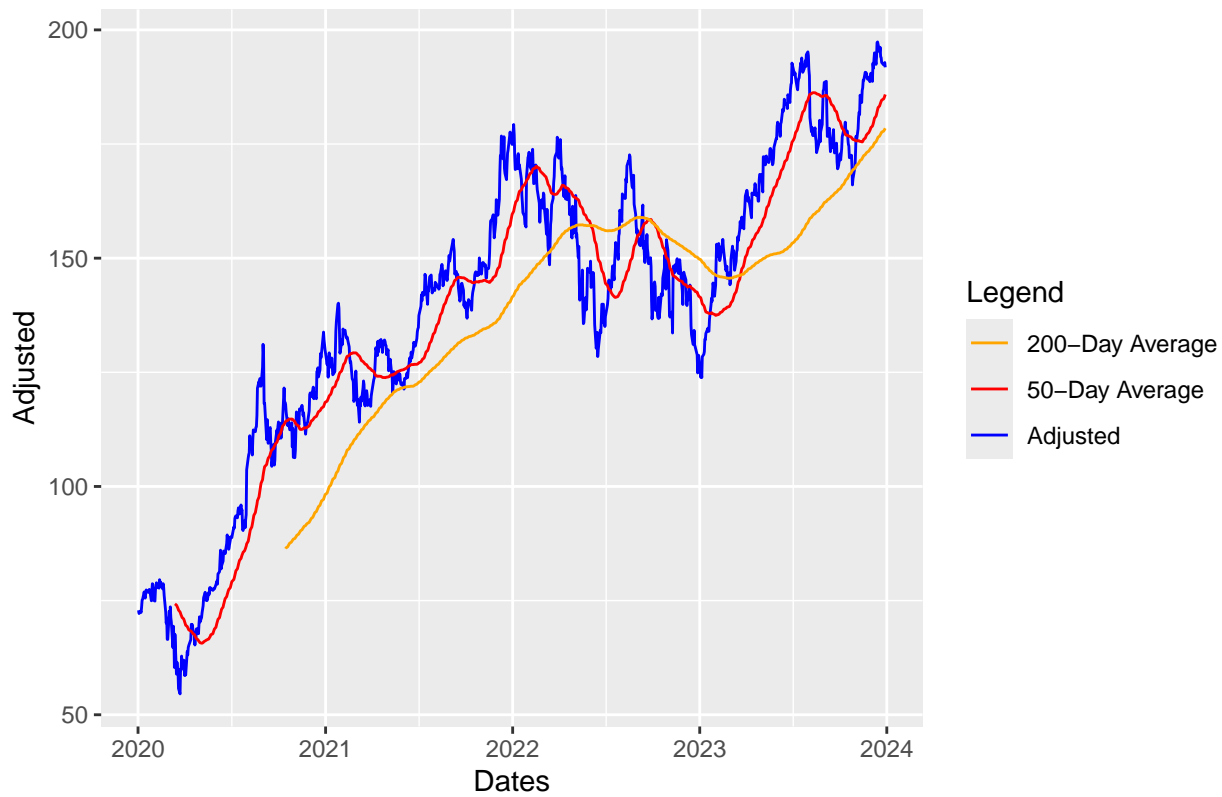
Chart of Volume over Time

Stock Price with Moving Average

```
stock_df$ma_50 <- SMA(stock_df$Adjusted, n=50)
stock_df$ma_200 <- SMA(stock_df$Adjusted, n=200)

colors <- c("Adjusted" = "blue", "50-Day Average" = "red", "200-Day Average" = "orange")

stock_df %>%
  ggplot(aes(x = Dates)) +
  geom_line(aes(y = Adjusted, color = "Adjusted")) +
  geom_line(aes(y = ma_50, color = "50-Day Average")) +
  geom_line(aes(y = ma_200, color = "200-Day Average")) +
  labs(
    color = "Legend"
  ) +
  scale_color_manual(values = colors) +
  ggtitle("Adjusted Stock Price and Moving Averages over Time")
```
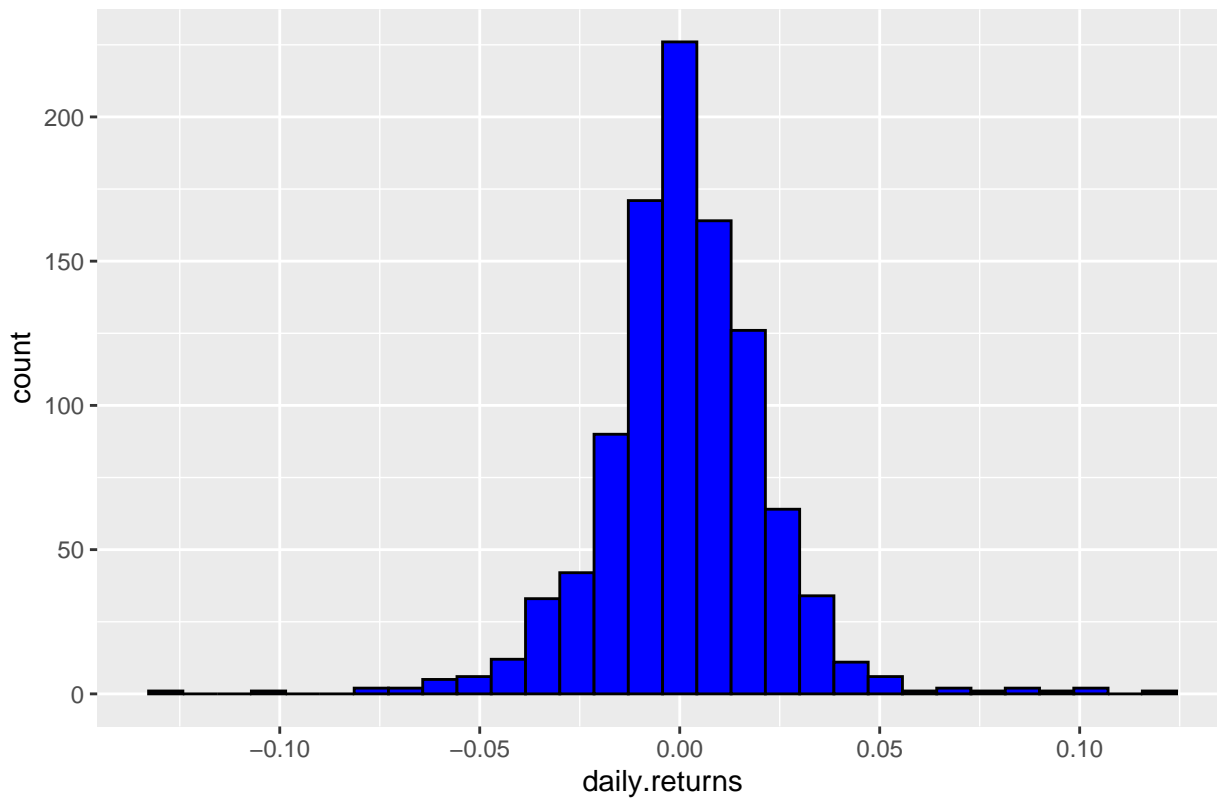
Adjusted Stock Price and Moving Averages over Time
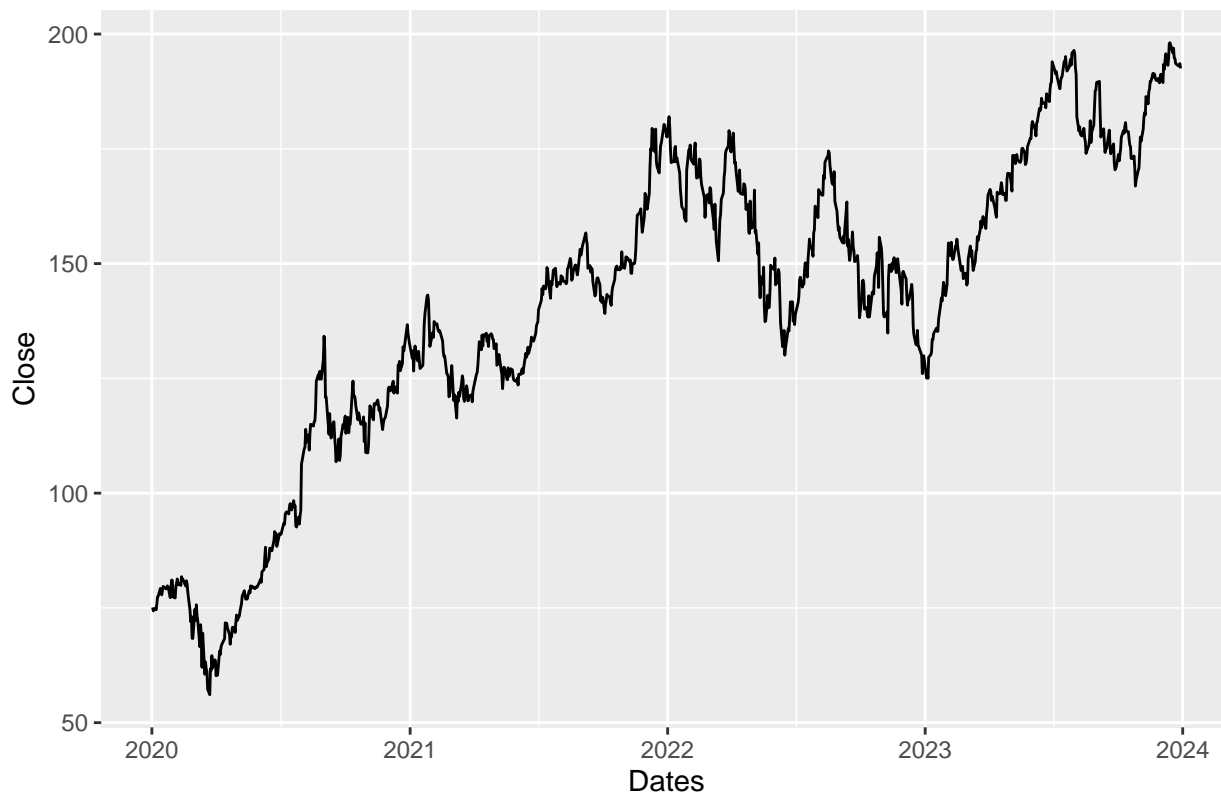

Daily Returns

```
stock_df %>%
  ggplot() +
  geom_histogram(aes(x = daily.returns), color = 'black', fill = 'blue') +
  theme_grey() +
  ggtitle('Histogram of Daily Returns over Selected Period')
```

Histogram of Daily Returns over Selected Period


```r
stock_df %>%
  ggplot() +
  geom_line(aes(x = Dates, y = Close)) +
  theme_grey() +
  ggtitle('Scatterplot of Apple Close Prices over Selected Period')
```

Scatterplot of Apple Close Prices over Selected Period

Saving Datasets

```r
#stock_identity <- data.frame(stock_identity)
#wd <- getwd()

#stock_df_filename <- paste0(wd, "/stock_df.csv")
#write.csv(stock_df, stock_df_filename, row.names = F)

#stock_identity_filename <- paste0(wd, "/stock_identity.csv")
#write.csv(stock_identity, stock_identity_filename, row.names = F)
```

```r
#wd <- getwd()
#print(wd)
```