ds

Sruthi Chandana

2024-11-02

Data Science Case Study

Dataset: Kaggle

Name: Sruthi Chandana

Reg NO: VU22CSEN0100291

Dataset used: FinancialStatements.csv

Initiation or Data Loading

```
library(dplyr)

##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':

##
## filter, lag

## The following objects are masked from 'package:base':

##
## intersect, setdiff, setequal, union

library(tidyr)
library(ggplot2)
data <- read.csv("/Users/sruthichandanakandipilli/Desktop/FinancialStatements.csv")</pre>
```

Columns in the dataset

```
print(colnames(data))
  [1] "Year"
                                               "Company"
## [3] "Category"
                                               "Market.Cap.in.B.USD."
## [5] "Revenue"
                                               "Gross.Profit"
   [7] "Net.Income"
                                               "Earning.Per.Share"
## [9] "EBITDA"
                                               "Share.Holder.Equity"
## [11] "Cash.Flow.from.Operating"
                                               "Cash.Flow.from.Investing"
## [13] "Cash.Flow.from.Financial.Activities" "Current.Ratio"
## [15] "Debt.Equity.Ratio"
                                               "ROE"
                                               "ROI"
## [17] "ROA"
## [19] "Net.Profit.Margin"
                                               "Free.Cash.Flow.per.Share"
```

```
## [21] "Return.on.Tangible.Equity" "Number.of.Employees"
## [23] "Inflation.Rate.in.US."
```

Dataset Representation

head(data)

```
Year Company Category Market.Cap.in.B.USD. Revenue Gross.Profit Net.Income
## 1 2022
             AAPL
                        ΙT
                                         2066.94 394328
                                                                170782
                                                                             99803
## 2 2021
             AAPL
                        IT
                                         2913.28 365817
                                                                152836
                                                                             94680
## 3 2020
             AAPL
                        IT
                                         2255.97 274515
                                                                104956
                                                                             57411
## 4 2019
             AAPL
                        IT
                                         1304.76 260174
                                                                 98392
                                                                             55256
## 5 2018
             AAPL
                        IT
                                          748.54 265595
                                                                101839
                                                                             59531
## 6 2017
             AAPL
                        IT
                                          868.87 229234
                                                                 88186
                                                                             48351
##
     Earning.Per.Share EBITDA Share.Holder.Equity Cash.Flow.from.Operating
                6.1100 130541
                                             50672
## 2
                5.6100 120233
                                             63090
                                                                       104038
## 3
                3.2800 77344
                                                                       80674
                                             65339
## 4
                2.9700 76477
                                             90488
                                                                       69391
## 5
                2.9800 81801
                                            107147
                                                                       77434
## 6
                2.3025 71501
                                                                       64225
                                            134047
     Cash.Flow.from.Investing Cash.Flow.from.Financial.Activities Current.Ratio
## 1
                       -22354
                                                            -110749
                                                                           0.8794
## 2
                        -14545
                                                             -93353
                                                                            1.0746
## 3
                         -4289
                                                             -86820
                                                                            1.3636
## 4
                                                             -90976
                        45896
                                                                            1.5401
## 5
                        16066
                                                             -87876
                                                                            1.1329
## 6
                        -46446
                                                             -17974
                                                                            1.2761
##
     Debt.Equity.Ratio
                             ROE
                                     ROA
                                             ROI Net.Profit.Margin
## 1
                2.3695 196.9589 28.2924 66.6994
                                                            25.3096
## 2
                1.9768 150.0713 26.9742 54.9839
                                                            25.8818
                1.7208 87.8664 17.7256 35.0054
## 3
                                                            20.9136
## 4
                1.1940
                        61.0645 16.3230 30.3113
                                                            21.2381
## 5
                1.0685 55.5601 16.2775 29.6348
                                                            22.4142
## 6
                0.8630 36.0702 12.8826 20.9082
                                                            21.0924
##
     Free.Cash.Flow.per.Share Return.on.Tangible.Equity Number.of.Employees
                                                 196.9589
## 1
                       1.3146
                                                                       164000
## 2
                       1.3261
                                                 150.0713
                                                                       154000
## 3
                       1.0183
                                                 87.8664
                                                                       147000
## 4
                       -0.0388
                                                 61.0645
                                                                       137000
## 5
                       0.7414
                                                 55.5601
                                                                       132000
## 6
                        0.0330
                                                 36.0702
                                                                       123000
##
     Inflation.Rate.in.US.
## 1
                    8.0028
## 2
                    4.6979
## 3
                    1.2336
## 4
                    1.8122
## 5
                    2.4426
## 6
                    2.1301
```

Summary of data

##

Max. : 36.686

Min. :

summary(data) ## Year Company Category Market.Cap.in.B.USD. ## :2009 Length:161 Length:161 : 0.04 1st Qu.:2012 Class :character Class :character 1st Qu.: 41.16 ## ## Median:2016 Mode :character Mode :character Median: 113.14 ## Mean :2016 : 337.60 Mean 3rd Qu.:2019 3rd Qu.: 357.11 Max. :2023 Max. ## :2913.28 ## NA's ## Gross.Profit Net.Income Revenue Earning.Per.Share : 3326 Min. Min. : 1174 Min. :-12244 Min. :-90.4800 1st Qu.: 22820 1st Qu.: 10396 ## 1st Qu.: 844 1st Qu.: 0.3400 Median : 45992 Median : 19561 Median: 4758 Median: 1.7900 ## Mean : 75863 Mean : 0.9829 Mean : 37383 Mean : 12277 3rd Qu.: 77849 3rd Qu.: 47722 3rd Qu.: 14136 3rd Qu.: 3.2400 ## Max. :513983 Max. :225152 Max. : 99803 Max. : 14.9800 ## ## **EBITDA** Share. Holder. Equity Cash. Flow. from. Operating ## Min. : -6860 : -8210 Min. :-39392 Min. 1st Qu.: 2310 1st Qu.: 12353 1st Qu.: 3502 Median : 47791 Median: 7387 ## Median: 9958 ## Mean : 20174 Mean : 57178 Mean : 20790 ## 3rd Qu.: 27765 3rd Qu.: 91571 3rd Qu.: 31626 ## Max. :130541 Max. :256144 Max. :122151 ## Cash.Flow.from.Investing Cash.Flow.from.Financial.Activities Current.Ratio ## Min. :-59611.0 Min. :-110749.0 Min. : 0.2205 ## 1st Qu.:-17434.0 1st Qu.: -9059.3 1st Qu.: 1.0000 Median : -5904.0 Median : -1408.0 Median : 1.3412 ## Mean : -9581.5 -8598.2 Mean : 2.0354 Mean 3rd Qu.: -981.6 735.3 3rd Qu.: 2.4734 ## 3rd Qu.: 25928.0 Max. : 49749.0 ## Max. Max. :10.6178 ## Debt.Equity.Ratio ROE ROA ROI Min. :-11.7750 :-212.61 :-23.7236 :-742.105 ## Min. Min. Min. ## 1st Qu.: 0.0772 1st Qu.: 5.08 1st Qu.: 0.8282 1st Qu.: 2.758 Median : 0.3818 Median : 14.50 Median : 6.6411 Median: 13.469 Mean : 0.6455 Mean : 12.43 Mean : 7.7805 Mean : 11.881 3rd Qu.: 0.8914 3rd Qu.: 28.19 3rd Qu.: 20.472 ## 3rd Qu.: 14.7016 : 884.861 ## Max. : 9.3328 Max. : 196.96 Max. : 31.1541 Max. ## ## Net. Profit. Margin Free. Cash. Flow.per. Share Return.on. Tangible. Equity ## Min. :-44.696 Min. :-121.5022 Min. :-554.174 ## 1st Qu.: 4.828 1st Qu.: -0.3613 1st Qu.: 6.112 Median: 15.298 Median : 0.2656 Median: 19.782 : 13.685 0.1928 : 24.247 Mean Mean Mean 3rd Qu.: 22.934 3rd Qu.: 0.9354 3rd Qu.: 36.981

.

Max. : 137.3287

:-0.3555

Number.of.Employees Inflation.Rate.in.US.

Min.

5420

Max. :1197.727

```
1st Qu.:
              29900
                        1st Qu.: 1.2616
   Median : 96000
                        Median: 1.8122
   Mean
           : 145719
                        Mean
                               : 2.2313
   3rd Qu.: 147000
                        3rd Qu.: 2.4426
   Max.
           :1608000
                        Max.
                               : 8.0028
##
```

DATA MANIPULATION IN R

1. Filter: Companies with Market Cap greater than 100 billion

```
filtered_data <- data %>%
  filter(Market.Cap.in.B.USD. > 100)
cat("Number of rows after filtering:", nrow(filtered_data), "\n")
## Number of rows after filtering: 87
print("Filtered Data:")
## [1] "Filtered Data:"
print(filtered data)
      Year Company Category Market.Cap.in.B.USD. Revenue Gross.Profit Net.Income
## 1
      2022
              AAPL
                                           2066.94 394328.0
                                                               170782.000
                                                                              99803.0
## 2
      2021
              AAPL
                          ΙT
                                           2913.28 365817.0
                                                               152836.000
                                                                              94680.0
      2020
## 3
              AAPL
                          IT
                                           2255.97 274515.0
                                                               104956.000
                                                                              57411.0
## 4
      2019
                          ΙT
              AAPL
                                           1304.76 260174.0
                                                                98392.000
                                                                              55256.0
## 5
      2018
              AAPL
                          ΙT
                                           748.54 265595.0
                                                               101839.000
                                                                              59531.0
## 6
      2017
              AAPL
                          ΙT
                                            868.87 229234.0
                                                                88186.000
                                                                              48351.0
## 7
      2016
                          IT
                                            617.59 215639.0
                                                                              45687.0
              AAPL
                                                                84263.000
## 8 2015
              AAPL
                          ΙT
                                            586.86 233715.0
                                                                93626.000
                                                                              53394.0
## 9
      2014
                                            647.36 182795.0
                                                                70537.000
              AAPL
                          ΙT
                                                                              39510.0
## 10 2013
              AAPL
                          IT
                                            504.79 170910.0
                                                                64304.000
                                                                              37037.0
## 11 2012
              AAPL
                          IT
                                            500.61 156508.0
                                                                68662.000
                                                                             41733.0
## 12 2011
              AAPL
                          IT
                                            376.40 108249.0
                                                                43818.000
                                                                              25922.0
## 13 2010
              AAPL
                          IT
                                            296.89 65225.0
                                                                25684.000
                                                                              14013.0
## 14 2009
              AAPL
                          IT
                                            189.80 42905.0
                                                                17222.000
                                                                              8235.0
## 15 2023
              MSFT
                          IT
                                           2451.23 211915.0
                                                               146052.000
                                                                             72361.0
## 16 2022
              MSFT
                          IT
                                           1787.73 198270.0
                                                               135620.000
                                                                             72738.0
## 17 2021
              MSFT
                          ΙT
                                           2525.08 168088.0
                                                               115856.000
                                                                              61271.0
## 18 2020
              MSFT
                          ΙT
                                           1681.61 143015.0
                                                                96937.000
                                                                              44281.0
## 19 2019
              MSFT
                          IT
                                           1203.06 125843.0
                                                                82933.000
                                                                              39240.0
## 20 2018
              MSFT
                          ΙT
                                           779.67 110360.0
                                                                72007.000
                                                                              16571.0
## 21 2017
              MSFT
                          ΙT
                                            659.91 96571.0
                                                                62310.000
                                                                              25489.0
## 22 2016
              MSFT
                          IT
                                            483.16 91154.0
                                                                58374.000
                                                                              20539.0
## 23 2015
              MSFT
                          ΙT
                                            443.17
                                                    93580.0
                                                                60542.000
                                                                              12193.0
## 24 2014
              MSFT
                          IT
                                            382.88
                                                    86833.0
                                                                59755.000
                                                                              22074.0
## 25 2013
              MSFT
                          IT
                                            312.30
                                                    77849.0
                                                                57464.000
                                                                              21863.0
## 26 2012
                          IT
                                            224.80
              MSFT
                                                    73723.0
                                                                56193.000
                                                                              16978.0
## 27 2011
                          IT
              MSFT
                                            218.38
                                                    69943.0
                                                                54366.000
                                                                              23150.0
## 28 2010
                          IT
              MSFT
                                            238.78
                                                    62484.0
                                                                50089.000
                                                                              18760.0
## 29 2009
              MSFT
                          IT
                                            270.64
                                                    58437.0
                                                                46282.000
                                                                              14569.0
## 30 2022
              GOOG
                          IT
                                           1144.35 282836.0
                                                               156633.000
                                                                             59972.0
```

		2021	GOOG	IT		257637.0	146698.000	76033.0
		2020	GOOG	IT		182527.0	97795.000	40269.0
##	33	2019	GOOG	IT		161857.0	89961.000	34343.0
##	34	2018	GOOG	IT		136819.0	77270.000	30736.0
##	35	2017	GOOG	IT	726.47	110855.0	65272.000	12662.0
##	36	2016	GOOG	IT	530.84	90272.0	55134.000	19478.0
##	37	2015	GOOG	IT	521.67	74989.0	46825.000	15826.0
##	38	2014	GOOG	IT	354.75	66001.0	40310.000	14136.0
##	39	2013	GOOG	IT	371.53	55519.0	33526.000	12733.0
##	40	2012	GOOG	IT	230.54	46039.0	28863.000	10737.0
##	41	2011	GOOG	IT	207.65	37905.0	24717.000	9737.0
##	42	2010	GOOG	IT	188.54	29321.0	18904.000	8505.0
##	43	2009	GOOG	IT	195.27	23651.0	14807.000	6520.0
##	44	2021	PYPL	FinTech	221.57	25371.0	11921.000	4169.0
		2020	PYPL	FinTech	274.41	21454.0	10001.000	4202.0
		2019	PYPL	FinTech	127.01	17772.0	7987.000	2459.0
		2022	MCD	FOOD	186.39	23182.6	13207.200	6177.4
		2021	MCD	FOOD	193.02	23222.9	12580.200	7545.2
		2020	MCD	FOOD	200.31	19207.8	9752.101	4730.5
		2019	MCD	FOOD	159.89	21364.4	11179.400	6025.4
		2018	MCD	FOOD	148.82	21257.9	10832.600	5924.3
		2017	MCD	FOOD	136.89	22820.4	10620.800	5192.3
		2016	MCD	FOOD	137.21	24621.9	10204.700	4686.5
		2015	MCD	FOOD	101.08	25413.0	9789.200	4529.3
		2014	MCD	FOOD	108.48	27441.3	10455.700	4757.8
		2010	MCD	FOOD	102.66	24074.6	9637.300	4946.3
		2023	NVDA	ELEC	1000.35	26974.0	15356.000	4368.0
		2022	NVDA	ELEC	359.50	26914.0	17475.000	9752.0
		2021	NVDA	ELEC	735.86	16675.0	10396.000	4332.0
		2021	NVDA	ELEC	323.24	10918.0	6768.000	2796.0
		2019	NVDA	ELEC	144.00	11716.0	7171.000	4141.0
		2017	NVDA	ELEC	117.26	6910.0	4063.000	1666.0
		2022	INTC	ELEC	109.08	63054.0	26866.000	8014.0
		2022	INTC	ELEC	209.45	79024.0	43815.000	19868.0
		2021	INTC	ELEC	104.16	77867.0	43612.000	20899.0
##		2020	INTC	ELEC	260.35	71965.0	42140.000	21048.0
		2019	INTC	ELEC	214.19	70848.0	43737.000	21048.0
		2017	INTC	ELEC	216.03	62761.0	39098.000	9601.0
		2017	INTC	ELEC	171.88	59387.0	36233.000	10316.0
			INTC					
		2015		ELEC	162.57	55355.0	34679.000	11420.0
		2014	INTC INTC	ELEC	175.46	55870.0	35609.000 31521.000	11704.0 9620.0
		2013		ELEC	129.02	52708.0		
		2012	INTC	ELEC	102.61	53341.0	33151.000	11005.0
		2011	INTC	ELEC	123.48	53999.0	33757.000	12942.0
		2010	INTC	ELEC	117.31	43623.0	28491.000	11464.0
		2009	INTC	ELEC	112.65	35127.0	19561.000	4369.0
		2022	AMZN	LOGI		513983.0	225152.000	-2722.0
		2021	AMZN	LOGI		469822.0	197478.000	33364.0
		2020	AMZN	LOGI		386064.0	152757.000	21331.0
		2019	AMZN	LOGI		280522.0	114986.000	11588.0
		2018	AMZN	LOGI		232887.0	93731.000	10073.0
		2017	AMZN	LOGI		177866.0	65932.000	3033.0
		2016	AMZN	LOGI		135987.0	47722.000	2371.0
##	84	2015	AMZN	LOGI	316.83	107006.0	35355.000	596.0

		2014		LOGI		88988.0	26236.000	-241.0
		2013		LOGI		74452.0		274.0
	87	2012		LOGI		61093.0	15122.000	-39.0
##		Earning	.Per.Share		Share.Holder.E			
##				130541.000		672.0		122151.0
##				120233.000		090.0		104038.0
##			3.2800			339.0		80674.0
## ##			2.9700 2.9800			488.0 147.0		69391.0 77434.0
##			2.3025			047.0		64225.0
##			2.0775			249.0		66231.0
##			2.3050			355.0		81266.0
##			1.6125			547.0		59713.0
	10		1.4200			549.0		53666.0
	11		1.5775			210.0		50856.0
	12		0.9886			615.0		37529.0
	13		0.5411			791.0		18595.0
	14		0.3243			640.0		10159.0
	15			102384.000		223.0		87582.0
##	16		9.6500			542.0		89035.0
##	17		8.0500	81602.000		988.0		76740.0
##	18		5.7600	65755.000	118	304.0		60675.0
##	19		5.0600	54641.000	102	330.0		52185.0
##	20		2.1300	45319.000	82	718.0		43884.0
##	21		3.2500	37803.000	87	711.0		39507.0
##	22		2.5600	33330.000	71	997.0		33325.0
##	23		1.4800	31616.000	80	083.0		29668.0
	24		2.6300		89	784.0		32502.0
	25		2.5800			944.0		28833.0
	26		2.0000			363.0		31626.0
	27		2.6900			083.0		26994.0
	28		2.1000			175.0		24073.0
	29		1.6200			558.0		19037.0
	30		4.5600			144.0		91495.0
	31		5.6100			635.0		91652.0
	32		2.9300			544.0		65124.0
	33		2.4580 2.1850			442.0 628.0		54520.0 47971.0
	34 35		0.9000			502.0		37091.0
	36		1.3925			036.0		36036.0
	37		1.1420			331.0		26572.0
	38		1.0285			860.0		23024.0
	39		0.9395			309.0		18659.0
	40		0.8080			715.0		16619.0
##			0.7440			145.0		14565.0
##	42		0.6578			241.0		11081.0
##	43		0.5103	9836.000	36	004.0		9316.0
##	44		3.5200	5527.000	21	727.0		5797.0
##	45		3.5400	4478.000	20	063.0		6219.0
##	46		2.0700	3631.000	16	929.0		4071.0
##	47		8.3300	11241.600	-6	003.4		7386.7
##	48		10.0400	12224.100	-4	601.0		9141.5
##	49		6.3100		-7	824.9		6265.2
##	50		7.8800	10687.700	-8	210.3		8122.1

##	51	7.5400 10304	.600			-6258.4		6966.7
##	52	6.3700 10916	.100			-3268.0		5551.2
##	53	5.4400 9261	.002			-2204.3		6059.6
##	54	4.8000 8701	.200			7087.9		6539.1
##	55	4.8200 9593	.701			12853.4		6730.3
##	56	4.5800 8749	.300			14634.2		6341.6
##	57	1.7400 5768	.000			22101.0		5641.0
##	58	3.8500 11215	.000			26612.0		9108.0
##	59	1.7300 5630	.000			16893.0		5822.0
##	60	1.1300 3227	.000			12204.0		4761.0
##	61	1.6575 4066	.000			9342.0		3743.0
##	62	0.6425 2121	.000			5762.0		1672.0
##	63	1.9400 15369	.000		:	103286.0		15433.0
##		4.8600 31248				95391.0		29456.0
##	65	4.9400 35917				81038.0		35864.0
##		4.7100 32861	.000			77504.0		33145.0
##		4.4800 32401	.000			74563.0		29432.0
##		1.9900 26179				69019.0		22110.0
##		2.1200 20923				66226.0		21808.0
##		2.3300 22713				61085.0		19018.0
##		2.3100 23896				55865.0		20418.0
##		1.8900 20323				58256.0		20776.0
##		2.1300 22160				51203.0		18884.0
##		2.3900 23541				45911.0		20963.0
##		2.0100 20226				49430.0		16692.0
##		0.7700 10763				41704.0		11170.0
##		-0.2700 54169				146043.0		46752.0
##		3.2400 59312				138245.0		46327.0
##		2.0900 48079				93404.0		66064.0
##		1.1505 36330				62060.0		38514.0
##		1.0070 27762				43549.0		30723.0
##		0.3075 15584				27709.0		18365.0
##		0.2450 12302				19285.0		17203.0
##		0.0625 8514				13384.0		12039.0
##		-0.0260 4924				10741.0		6842.0
##			.000			9746.0		5475.0
##		-0.0045 2835				8192.0		4180.0
##	٠.	Cash.Flow.from.Investing		Flow	from 1		Activities	
##	1	-22354.0		10w	.11011.1	indicial	-110749.0	0.8794
##		-14545.0					-93353.0	1.0746
##		-4289.0					-86820.0	1.3636
##		45896.0					-90976.0	1.5401
##		16066.0					-87876.0	1.1329
##		-46446.0					-17974.0	1.2761
##		-45977.0					-20890.0	1.3527
##		-56274.0					-17716.0	1.1088
##		-22579.0					-37549.0	1.0801
##		-33774.0					-16379.0	1.6786
##		-48227.0 -40419.0					-1698.0	1.4958
##		-40419.0 -13854.0					1444.0	1.6084
##		-13854.0 -17424.0					1257.0	2.0113
##		-17434.0 -22690.0					663.0	2.7425
##		-22680.0					-43935.0	1.7692
##	тρ	-30311.0					-58876.0	1.7846

##	17	-27577.0	-48486.0	2.0800
##	18	-12223.0	-46031.0	2.5158
##	19	-15773.0	-36887.0	2.5288
##	20	-6061.0	-33590.0	2.9008
##	21	-46781.0	8408.0	2.9186
##	22	-23950.0	-8393.0	2.3529
##	23	-23001.0	-9668.0	2.4734
##	24	-18833.0	-8665.0	2.5040
##	25	-23811.0	-8148.0	2.7118
##	26	-24786.0	-9408.0	2.6029
##	27	-14616.0	-8376.0	2.6037
##	28	-11314.0	-13291.0	2.1293
##	29	-15770.0	-7463.0	1.8229
##	30	-20298.0	-69757.0	2.3780
##	31	-35523.0	-61362.0	2.9281
##	32	-32773.0	-24408.0	3.0668
##	33	-29491.0	-23209.0	3.3741
##	34	-28504.0	-13179.0	3.9190
##	35	-31401.0	-8298.0	5.1403
##	36	-31165.0	-8332.0	6.2908
##	37	-23711.0	-4225.0	4.6667
##	38	-21055.0	-2087.0	4.6878
##	39	-13679.0	-857.0	4.5817
##	40	-13056.0	1229.0	4.2166
##	41	-19041.0	807.0	5.9192
##	42	-10680.0	3050.0	4.1579
##	43	-8019.0	233.0	10.6178
##	44	-5149.0	-557.0	1.2218
##		-16545.0	12454.0	1.3264
##		-5742.0	4187.0	1.4300
##		-2678.1	-6580.2	1.4266
##		-2165.7	-5595.6	1.7782
##		-1545.8	-2249.0	1.0100
##		-3071.1	-4994.8	0.9826
##		-2455.1	-5949.6	1.3631
##		562.0	-5310.8	1.8429
##		-981.6	-11262.4	1.3980
##		-1420.0	735.3	3.2684
##		-2304.9	-4618.3	1.5232
##		-2056.0	-3728.7	1.4937
##		7375.0	-11617.0	3.5156
##		-9830.0	1865.0	6.6503
##		-19675.0	3804.0	4.0904
##		6145.0	-792.0	7.6738
##		-4097.0	-2866.0	7.9436
##		-793.0	291.0	4.7740
##		-10477.0	1361.0	1.5676
##		-24449.0	-6045.0	2.1323
##		-21524.0	-12669.0	1.9087
##		-14405.0	-17565.0	1.4002
##		-11239.0	-18607.0	1.7314
##		-15762.0	-8475.0	1.6934
##		-25817.0	-5739.0	1.7490
##	70	-8183.0	1912.0	2.4492

```
## 71
                        -9905.0
                                                             -13611.0
                                                                              1.7319
## 72
                                                               -5498.0
                                                                              2.3647
                       -18073.0
## 73
                       -14060.0
                                                              -1408.0
                                                                              2.4312
## 74
                       -10301.0
                                                             -11100.0
                                                                              2.1510
## 75
                       -10539.0
                                                              -4642.0
                                                                              3.3892
## 76
                        -7965.0
                                                              -2568.0
                                                                              2.7871
## 77
                       -37601.0
                                                               9718.0
                                                                              0.9446
## 78
                       -58154.0
                                                               6291.0
                                                                              1.1358
## 79
                       -59611.0
                                                              -1104.0
                                                                              1.0502
## 80
                       -24281.0
                                                             -10066.0
                                                                              1.0970
## 81
                       -12369.0
                                                              -7686.0
                                                                              1.0981
## 82
                       -27084.0
                                                               9928.0
                                                                              1.0400
## 83
                        -9516.0
                                                              -3716.0
                                                                              1.0448
## 84
                        -6450.0
                                                              -3882.0
                                                                              1.0536
                        -5065.0
## 85
                                                                4432.0
                                                                              1.1153
## 86
                        -4276.0
                                                                -539.0
                                                                               1.0716
## 87
                        -3595.0
                                                                2259.0
                                                                              1.1207
##
      Debt.Equity.Ratio
                               ROE
                                        ROA
                                                 ROI Net.Profit.Margin
## 1
                  2.3695
                          196.9589 28.2924 66.6994
                                                               25.3096
## 2
                  1.9768
                          150.0713 26.9742 54.9839
                                                                25.8818
## 3
                  1.7208
                           87.8664 17.7256 35.0054
                                                               20.9136
## 4
                           61.0645 16.3230 30.3113
                  1.1940
                                                               21.2381
## 5
                           55.5601 16.2775 29.6348
                  1.0685
                                                               22.4142
                           36.0702 12.8826 20.9082
## 6
                  0.8630
                                                               21.0924
## 7
                           35.6237 14.2024 22.4312
                  0.6786
                                                               21.1868
## 8
                  0.5390
                           44.7355 18.3899 30.9201
                                                               22.8458
## 9
                           35.4201 17.0420 28.1142
                                                               21.6144
                  0.3164
                           29.9776 17.8923 26.3592
## 10
                  0.1373
                                                               21.6705
## 11
                  0.0000
                           35.3041 23.7033 35.3041
                                                               26.6651
## 12
                  0.0000
                           33.8341 22.2753 33.8341
                                                                23.9466
## 13
                  0.0000
                           29.3214 18.6385 29.3214
                                                                21.4841
## 14
                  0.0000
                           26.0272 17.3365 26.0272
                                                               19.1936
## 15
                  0.2291
                           35.0887 17.5644 29.1528
                                                               34.1462
## 16
                           43.6755 19.9370 34.0575
                  0.2989
                                                               36.6863
## 17
                  0.4095
                           43.1522 18.3568 31.9017
                                                                36.4517
## 18
                           37.4298 14.6961 24.8935
                  0.5353
                                                               30.9625
## 19
                  0.7053
                           38.3465 13.6937 23.2200
                                                               31.1817
## 20
                  0.9217
                           20.0331 6.4018 10.6937
                                                               15.0154
## 21
                  0.9827
                           29.0602 10.1829 15.5626
                                                                26.3941
## 22
                           28.5276 10.6162 18.2481
                  0.7425
                                                               22.5322
## 23
                           15.2255 6.9885 11.3012
                  0.4407
                                                               13.0295
## 24
                  0.2522
                           24.5857 12.8051 19.9893
                                                               25.4212
                           27.6943 15.3499 23.8822
## 25
                  0.1976
                                                               28.0839
## 26
                  0.1800
                           25.5835 14.0001 22.0276
                                                               23.0295
## 27
                  0.2088
                           40.5550 21.2964 33.5488
                                                                33.0984
## 28
                           40.6280 21.7853 36.7023
                  0.1286
                                                                30.0237
## 29
                  0.1453
                           36.8295 18.7051 33.6435
                                                               24.9311
## 30
                           23.4134 16.4188 22.1426
                  0.0574
                                                               21.2038
                                                                29.5117
## 31
                  0.0589
                           30.2156 21.1633 28.5354
## 32
                  0.0626
                           18.0949 12.5992 17.0288
                                                                22.0619
## 33
                           17.0486 12.4472 16.6717
                  0.0226
                                                                21.2181
## 34
                  0.0226
                           17.3036 13.2032 16.9214
                                                               22.4647
## 35
                  0.0260
                            8.3028 6.4178 8.0922
                                                               11.4221
## 36
                  0.0283
                           14.0093 11.6289 13.6237
                                                                21.5770
```

```
## 37
                 0.0434
                           13.5859 11.0863 13.3643
                                                              21.1044
## 38
                 0.0504
                           13.1138 10.5429 12.7185
                                                              21.4179
## 39
                 0.0601
                           15.0729 11.8644 14.6965
                                                              22.9345
## 40
                 0.0772
                           16.1096 12.3169 15.4652
                                                              23.3215
## 41
                 0.0723
                           16.7461 13.4167 15.9281
                                                              25.6879
                          18.3928 14.7016 18.3928
## 42
                 0.0749
                                                              29.0065
                          18.1091 16.1000 18.1091
## 43
                 0.0000
                                                              27.5675
## 44
                 0.3705
                           19.1881 5.4998 14.0012
                                                              16.4322
## 45
                 0.4455
                           20.9440
                                   5.9705 14.4887
                                                              19.5861
## 46
                 0.2933
                           14.5254 4.7903 11.2314
                                                              13.8364
## 47
                -5.9805 -102.8983 12.2481 20.6601
                                                              26.6467
                -7.7424 -163.9903 14.0104 24.3223
## 48
                                                              32.4903
## 49
                -4.7848 -60.4545 8.9888 17.2823
                                                              24.6280
## 50
                         -73.3883 12.6822 23.2571
                -4.1627
                                                              28.2030
## 51
                -4.9654 -94.6616 18.0557 23.8720
                                                              27.8687
## 52
                -9.0381 -158.8832 15.3602 19.7663
                                                              22.7529
## 53
               -11.7750 -212.6069 15.1061 19.7958
                                                              19.0339
## 54
                 3.4033
                           63.9019 11.9385 14.5123
                                                              17.8228
## 55
                          37.0159 13.9006 17.1211
                 1.1620
                                                              17.3381
## 56
                 0.7862
                          33.7996 15.4692 18.9287
                                                              20.5457
## 57
                 0.4956
                          19.7638 10.6066 13.7341
                                                              16.1934
## 58
                 0.4113
                           36.6451 22.0698 25.9652
                                                              36.2339
                 0.4122
                           25.6438 15.0464 18.9526
## 59
                                                              25.9790
                           22.9105 16.1479 19.6971
## 60
                 0.1631
                                                              25.6091
## 61
                 0.2128
                           44.3267 31.1541 36.5490
                                                              35.3448
## 62
                 0.4877
                           28.9136 16.9292 21.4249
                                                              24.1100
## 63
                 0.4071
                           7.7619 4.4025 5.6870
                                                              12.7097
## 64
                 0.3994
                           20.8280 11.7977 15.4134
                                                              25.1417
## 65
                           25.7891 13.6514 18.1833
                 0.4492
                                                              26.8394
## 66
                 0.3742
                           27.1573 15.4171 20.4723
                                                              29.2476
## 67
                 0.3535
                           28.2352 16.4524 21.1246
                                                              29.7157
## 68
                 0.3885
                           13.9107 7.7899 10.2078
                                                              15.2977
## 69
                 0.3818
                           15.5770 9.1029 11.8745
                                                              17.3708
                           18.6953 11.2558 14.0777
## 70
                 0.3711
                                                              20.6305
## 71
                 0.2444
                           20.9505 12.7356 17.2310
                                                              20.9486
## 72
                          16.5133 10.4160 13.4694
                 0.2308
                                                              18.2515
## 73
                 0.2626
                           21.4929 13.0467 17.1047
                                                              20.6314
## 74
                 0.1597
                           28.1893 18.1977 24.4212
                                                              23.9671
## 75
                 0.0428
                           23.1924 18.1433 22.2572
                                                              26.2797
## 76
                           10.4762 8.2286 9.9856
                 0.0533
                                                              12.4377
                           -1.8638 -0.5883 -1.2768
## 77
                 0.4598
                                                              -0.5296
## 78
                 0.3526
                           24.1340
                                   7.9334 17.8428
                                                               7.1014
## 79
                 0.3406
                           22.8374
                                   6.6411 17.0348
                                                               5.5252
## 80
                 0.3773
                           18.6723
                                   5.1446 13.5573
                                                               4.1309
## 81
                 0.5395
                           23.1303
                                    6.1931 15.0245
                                                               4.3253
## 82
                                    2.3098 5.7824
                 0.8930
                           10.9459
                                                               1.7052
## 83
                 0.3990
                           12.2945
                                    2.8429
                                            8.7883
                                                               1.7435
## 84
                 0.6147
                            4.4531 0.9205 2.7579
                                                               0.5570
## 85
                 0.7695
                           -2.2437 -0.4422 -1.2680
                                                              -0.2708
## 86
                 0.3274
                            2.8114 0.6823 2.1180
                                                               0.3680
## 87
                 0.3765
                          -0.4761 -0.1198 -0.3459
                                                              -0.0638
##
      Free.Cash.Flow.per.Share Return.on.Tangible.Equity Number.of.Employees
## 1
                         1.3146
                                                  196.9589
                                                                         164000
## 2
                         1.3261
                                                  150.0713
                                                                         154000
```

	_			
##		1.0183	87.8664	147000
##	4	-0.0388	61.0645	137000
##	5	0.7414	55.5601	132000
##	6	0.0330	36.0702	123000
##	7	-0.5901	38.1906	116000
##	8	0.9743	48.3878	110000
##		0.3032	38.4380	97000
##		0.1363	31.4425	84400
	11	0.3394	36.9806	76100
##	12	0.6278	35.9115	63300
	13	0.2857	30.0013	49400
	14	0.3550	26.4052	36800
	15	-0.6808	56.1064	221000
	16	1.2643	82.9207	221000
	17	1.4887	72.5298	181000
	18	0.9526	65.2006	163000
##	19	0.7968	74.6661	144000
	20	0.1317	42.5094	131000
##	21	0.8887	59.9981	124000
##	22	0.2435	40.7585	114000
##	23	-0.3425	20.9110	118000
##	24	0.3152	35.2192	128000
##	25	-0.5456	35.7204	118000
##	26	0.5798	34.1328	128000
##	27	0.3921	52.9046	99000
##		0.7057	57.5054	94000
##		1.7695	57.5941	90000
##		-0.3613	26.6424	190234
##		1.7123	33.4561	156500
	32	0.8430	20.1422	135301
##		0.5566	19.2033	118899
##		-0.0705	19.5124	98771
##				
		-0.1510	9.5158	80110
	36	0.6249	16.3323	72053
##		0.3054	16.2481	61814
##		0.0463	16.2814	53600
##		-0.2373	18.8671	47756
##		0.1539	21.5120	53861
##		0.3039	19.7822	32467
##	42	-0.1195	21.8407	24400
##	43	0.6657	21.4997	19835
##	44	-0.4843	46.6279	30900
##	45	1.7623	42.5304	26500
##	46	-1.0251	24.7409	23200
##	47	-2.1323	-69.3794	150000
##	48	3.3857	-102.1900	200000
##	49	-1.4852	-44.6358	200000
##	50	2.1046	-55.3414	205000
	51	0.8436	-68.9682	210000
##		-0.2793	-91.9365	235000
##		-0.2100	-103.2087	375000
##		0.9354	99.0748	420000
##		0.0221	47.0227	420000
##		0.4630	41.0546	400000
##	50	0.4030	41.0540	400000

##	57	-1.6890	27.2099 26196	i
##	58	1.3378	48.9460 22473)
##	59	0.1419	43.4809 18975	,
##	60	0.4710	24.2351 13775	,
##	61	0.1057	47.7129 13277	
##	62	0.0975	33.0556 10299	į
##	63	-4.5640	11.5060 131900	
	64	-2.8278	32.4864 121100	
	65	1.2739	46.4000 110600	
##		0.7539	52.0977 110800	
##		0.8946	55.0924 107400	
##		-0.3622	30.1113 102700	
##		0.1101	24.1972 106000	
##		0.3492	24.9236 107300	
##		0.0651	28.8574 106700	
	72	0.4520	22.5859 107600	
##		-0.3622	31.2128 105000	
##		-0.1314	42.5864 100100	
##		0.1314	26.0315 82500	
##		1.1789	11.7185 79800	
##		-0.2546	-2.1645 1541000	
##		-3.9226	27.1530 1608000	
##		0.4798	27.2124 1298000	
##		0.6220	24.4958 798000	
##		1.0975	34.7333 647500	
	82	-0.2387	21.1226 566000	
##		0.3003	15.2958 341400	
##		0.5700	6.1922 230800	
##		-0.0075	-3.2471 154100	
##		0.1748	3.8641 117300	
##		-0.1833	-0.6915 88400	
##	01	Inflation.Rate.in.US.	0.0913	
	1	8.0028		
	2	4.6979		
##		1.2336		
##		1.8122		
##		2.4426		
##		2.1301		
##		1.2616		
##		0.1186		
##		1.6222		
	10	1.4648		
##		2.0693		
##		3.1568		
##		1.6400		
##		-0.3555		
##		3.7000		
##		8.0028		
##		4.6979		
##		1.2336		
##				
##		1.8122 2.4426		
##				
##		2.1301 1.2616		

## 23	0.1186
## 24	1.6222
## 25	1.4648
## 26	2.0693
## 27	3.1568
## 28	1.6400
## 29	-0.3555
## 30	8.0028
## 31	4.6979
## 32	1.2336
## 33	1.8122
## 34	2.4426
## 35	2.1301
## 36	1.2616
## 37	0.1186
## 38	1.6222
## 39	1.4648
## 40	2.0693
## 41	3.1568
## 42	1.6400
## 43	-0.3555
## 44	4.6979
## 45	1.2336
## 46	1.8122
## 47	8.0028
## 48	4.6979
## 49	1.2336
## 50	1.8122
## 51	2.4426
## 52	2.1301
	1.2616
	0.1186
## 54	
## 55 ## 56	1.6222
## 56	1.6400
## 57	3.7000
## 58	8.0028
## 59	4.6979
## 60	1.2336
## 61	1.8122
## 62	2.1301
## 63	8.0028
## 64	4.6979
## 65	1.2336
## 66	1.8122
## 67	2.4426
## 68	2.1301
## 69	1.2616
## 70	0.1186
## 71	1.6222
## 72	1.4648
## 73	2.0693
## 74	3.1568
## 75	1.6400
## 76	-0.3555

```
## 77
                       8.0028
## 78
                       4.6979
## 79
                       1.2336
## 80
                       1.8122
## 81
                       2.4426
## 82
                       2.1301
## 83
                       1.2616
## 84
                       0.1186
## 85
                       1.6222
## 86
                       1.4648
## 87
                       2.0693
```

2. Remove duplicates

28 2010

MSFT

IT

```
distinct_data <- filtered_data %>%
  distinct()
cat("Number of rows after removing duplicates:", nrow(distinct_data), "\n")
## Number of rows after removing duplicates: 87
print("Distinct Data:")
## [1] "Distinct Data:"
print(distinct_data)
##
      Year Company Category Market.Cap.in.B.USD.
                                                     Revenue Gross.Profit Net.Income
                          IT
## 1
      2022
               AAPL
                                           2066.94 394328.0
                                                                170782.000
                                                                               99803.0
## 2
      2021
               AAPL
                          IT
                                           2913.28 365817.0
                                                                152836.000
                                                                               94680.0
## 3
      2020
                          ΙT
              AAPL
                                           2255.97 274515.0
                                                                104956.000
                                                                               57411.0
## 4
      2019
               AAPL
                          IT
                                           1304.76 260174.0
                                                                 98392.000
                                                                               55256.0
## 5
      2018
              AAPL
                          IT
                                            748.54 265595.0
                                                                101839.000
                                                                               59531.0
## 6
      2017
               AAPL
                          IT
                                            868.87 229234.0
                                                                 88186.000
                                                                               48351.0
## 7
              AAPL
      2016
                          IT
                                            617.59 215639.0
                                                                 84263.000
                                                                               45687.0
## 8
      2015
              AAPL
                          IT
                                            586.86 233715.0
                                                                 93626.000
                                                                               53394.0
## 9
      2014
                                                                 70537.000
               AAPL
                          IT
                                            647.36 182795.0
                                                                               39510.0
## 10 2013
               AAPL
                          IT
                                            504.79 170910.0
                                                                 64304.000
                                                                               37037.0
## 11 2012
              AAPL
                          IT
                                            500.61 156508.0
                                                                 68662.000
                                                                               41733.0
## 12 2011
                          IT
               AAPL
                                            376.40 108249.0
                                                                 43818.000
                                                                               25922.0
## 13 2010
               AAPL
                          IT
                                            296.89
                                                     65225.0
                                                                 25684.000
                                                                               14013.0
## 14 2009
               AAPL
                          IT
                                            189.80
                                                     42905.0
                                                                 17222.000
                                                                                8235.0
## 15 2023
               MSFT
                          IT
                                           2451.23 211915.0
                                                                146052.000
                                                                               72361.0
## 16 2022
               MSFT
                          IT
                                           1787.73 198270.0
                                                                135620.000
                                                                               72738.0
## 17 2021
               MSFT
                          IT
                                           2525.08 168088.0
                                                                115856.000
                                                                               61271.0
                                           1681.61 143015.0
                                                                 96937.000
## 18 2020
                          IT
                                                                               44281.0
              MSFT
## 19 2019
               MSFT
                          IT
                                           1203.06 125843.0
                                                                 82933.000
                                                                               39240.0
## 20 2018
                                                                 72007.000
               MSFT
                          IT
                                            779.67 110360.0
                                                                               16571.0
## 21 2017
               MSFT
                          IT
                                            659.91
                                                     96571.0
                                                                 62310.000
                                                                               25489.0
## 22 2016
              MSFT
                          IT
                                            483.16
                                                     91154.0
                                                                 58374.000
                                                                               20539.0
## 23 2015
               MSFT
                          IT
                                            443.17
                                                     93580.0
                                                                 60542.000
                                                                               12193.0
## 24 2014
              MSFT
                          IT
                                            382.88
                                                     86833.0
                                                                 59755.000
                                                                               22074.0
## 25 2013
                          IT
                                            312.30
                                                     77849.0
                                                                 57464.000
                                                                               21863.0
               MSFT
## 26 2012
              MSFT
                          IT
                                            224.80
                                                     73723.0
                                                                 56193.000
                                                                               16978.0
## 27 2011
                          IT
                                            218.38
              MSFT
                                                     69943.0
                                                                 54366.000
                                                                               23150.0
```

238.78

62484.0

50089.000

18760.0

##	29	2009	MSFT	IT	270.64	58437.0	46282.000	14569.0
		2022	GOOG	IT		282836.0	156633.000	59972.0
		2021	GOOG	IT		257637.0	146698.000	76033.0
		2020	GOOG	IT		182527.0	97795.000	40269.0
		2019	GOOG	IT		161857.0	89961.000	34343.0
		2018	GOOG	IT		136819.0	77270.000	30736.0
		2017	GOOG	IT		110855.0	65272.000	12662.0
		2016	GOOG	IT	530.84	90272.0	55134.000	19478.0
		2015	GOOG	IT	521.67	74989.0	46825.000	15826.0
		2014	GOOG	IT	354.75	66001.0	40310.000	14136.0
		2013	GOOG	IT	371.53	55519.0	33526.000	12733.0
##	40	2012	GOOG	IT	230.54	46039.0	28863.000	10737.0
##	41	2011	GOOG	IT	207.65	37905.0	24717.000	9737.0
##	42	2010	GOOG	IT	188.54	29321.0	18904.000	8505.0
##	43	2009	GOOG	IT	195.27	23651.0	14807.000	6520.0
##	44	2021	PYPL	FinTech	221.57	25371.0	11921.000	4169.0
##	45	2020	PYPL	FinTech	274.41	21454.0	10001.000	4202.0
##	46	2019	PYPL	FinTech	127.01	17772.0	7987.000	2459.0
##	47	2022	MCD	FOOD	186.39	23182.6	13207.200	6177.4
##	48	2021	MCD	FOOD	193.02	23222.9	12580.200	7545.2
##	49	2020	MCD	FOOD	200.31	19207.8	9752.101	4730.5
##	50	2019	MCD	FOOD	159.89	21364.4	11179.400	6025.4
##	51	2018	MCD	FOOD	148.82	21257.9	10832.600	5924.3
##	52	2017	MCD	FOOD	136.89	22820.4	10620.800	5192.3
##	53	2016	MCD	FOOD	137.21	24621.9	10204.700	4686.5
##	54	2015	MCD	FOOD	101.08	25413.0	9789.200	4529.3
##	55	2014	MCD	FOOD	108.48	27441.3	10455.700	4757.8
##	56	2010	MCD	FOOD	102.66	24074.6	9637.300	4946.3
		2023	NVDA	ELEC	1000.35	26974.0	15356.000	4368.0
		2022	NVDA	ELEC	359.50	26914.0	17475.000	9752.0
		2021	NVDA	ELEC	735.86	16675.0	10396.000	4332.0
		2020	NVDA	ELEC	323.24	10918.0	6768.000	2796.0
		2019	NVDA	ELEC	144.00	11716.0	7171.000	4141.0
		2017	NVDA	ELEC	117.26	6910.0	4063.000	1666.0
		2022	INTC	ELEC	109.08	63054.0	26866.000	8014.0
		2021	INTC	ELEC	209.45	79024.0	43815.000	19868.0
		2020	INTC	ELEC	104.16	77867.0	43612.000	20899.0
		2019	INTC	ELEC	260.35	71965.0	42140.000	21048.0
		2018	INTC	ELEC	214.19	70848.0	43737.000	21053.0
		2017	INTC	ELEC	216.03	62761.0	39098.000	9601.0
		2016	INTC	ELEC	171.88	59387.0	36233.000	10316.0
		2015	INTC	ELEC	162.57	55355.0	34679.000	11420.0
		2014	INTC	ELEC	175.46	55870.0	35609.000	11704.0
		2013	INTC	ELEC	129.02	52708.0	31521.000	9620.0
		2012	INTC	ELEC	102.61	53341.0	33151.000	11005.0
		2011	INTC	ELEC	123.48	53999.0	33757.000	12942.0
		2010	INTC	ELEC	117.31	43623.0	28491.000	11464.0 4369.0
		2009	INTC	ELEC	112.65	35127.0	19561.000	
		2022	AMZN	LOGI		513983.0	225152.000	-2722.0
		2021 2020	AMZN	LOGI		469822.0	197478.000	33364.0
		2020	AMZN AMZN	LOGI LOGI		386064.0 280522.0	152757.000 114986.000	21331.0 11588.0
		2019	AMZN AMZN	LOGI		232887.0	93731.000	10073.0
		2018	AMZN AMZN	LOGI		177866.0	65932.000	3033.0
##	02	2011	HITIN	FOGT	303.54	111000.0	00932.000	3033.0

				LOGI		135987.0	47722.000	2371.0
				LOGI		107006.0	35355.000	596.0
				LOGI	143.70		26236.000	-241.0
				LOGI	182.54		20271.000	274.0
	87			LOGI	113.63		15122.000	-39.0
##	4	Earning.F		130541.000	Share.Holder.E	quity Casn. 1672.0		perating 122151.0
## ##				120233.000		3090.0		104038.0
##			3.2800	77344.000		339.0		80674.0
##			2.9700			488.0		69391.0
##			2.9800	81801.000		147.0		77434.0
##			2.3025	71501.000		.047.0		64225.0
##			2.0775	70529.000		3249.0		66231.0
##			2.3050	82487.000		355.0		81266.0
##			1.6125	60449.000		547.0		59713.0
	10		1.4200	55756.000		549.0		53666.0
	11		1.5775	58518.000		210.0		50856.0
	12		0.9886			615.0		37529.0
	13		0.5411			791.0		18595.0
	14		0.3243	12474.000		640.0		10159.0
##	15			102384.000	206	223.0		87582.0
##	16		9.6500	97843.000	166	542.0		89035.0
##	17		8.0500	81602.000	141	988.0		76740.0
##	18		5.7600	65755.000	118	304.0		60675.0
##	19		5.0600	54641.000	102	330.0		52185.0
##	20		2.1300	45319.000	82	718.0		43884.0
##	21		3.2500	37803.000	87	711.0		39507.0
	22		2.5600	33330.000	71	997.0		33325.0
	23		1.4800	31616.000		083.0		29668.0
	24		2.6300	32971.000		784.0		32502.0
	25		2.5800	30519.000		3944.0		28833.0
	26		2.0000	30923.000		363.0		31626.0
	27		2.6900	29927.000		083.0		26994.0
	28		2.1000	26771.000		175.0		24073.0
	29 30		1.6200 4.5600	22925.000 90770.000		558.0		19037.0 91495.0
##				91155.000		625.0		91495.0
	32		5.6100 2.9300	54921.000		.635.0 .544.0		65124.0
	33		2.4580	46012.000		442.0		54520.0
	34		2.1850	36559.000		628.0		47971.0
	35		0.9000	33093.000		2502.0		37091.0
	36		1.3925	29860.000		036.0		36036.0
	37		1.1420	24423.000		331.0		26572.0
	38		1.0285	21475.000		860.0		23024.0
	39		0.9395	19342.000		309.0		18659.0
##	40		0.8080	16796.000	71	715.0		16619.0
##	41		0.7440	13593.000	58	3145.0		14565.0
##	42		0.6578	11777.000	46	241.0		11081.0
##	43		0.5103	9836.000	36	004.0		9316.0
	44		3.5200	5527.000	21	727.0		5797.0
	45		3.5400	4478.000		063.0		6219.0
	46		2.0700	3631.000		929.0		4071.0
	47		8.3300	11241.600		3003.4		7386.7
##	48		10.0400	12224.100	-4	601.0		9141.5

##	49	6.3100 9075	.400	-7824.9	6265.2
##	50	7.8800 10687	.700	-8210.3	8122.1
##	51	7.5400 10304	.600	-6258.4	6966.7
##	52	6.3700 10916	. 100	-3268.0	5551.2
##	53	5.4400 9261	.002	-2204.3	6059.6
##	54	4.8000 8701	. 200	7087.9	6539.1
##	55	4.8200 9593	.701	12853.4	6730.3
##	56	4.5800 8749	.300	14634.2	6341.6
##	57	1.7400 5768	.000	22101.0	5641.0
##	58	3.8500 11215	.000	26612.0	9108.0
##	59	1.7300 5630	.000	16893.0	5822.0
##	60	1.1300 3227	.000	12204.0	4761.0
##	61	1.6575 4066	.000	9342.0	3743.0
##	62	0.6425 2121	.000	5762.0	1672.0
##	63	1.9400 15369	.000	103286.0	15433.0
##	64	4.8600 31248	.000	95391.0	29456.0
##	65	4.9400 35917	.000	81038.0	35864.0
##	66	4.7100 32861	.000	77504.0	33145.0
##	67	4.4800 32401	.000	74563.0	29432.0
##	68	1.9900 26179	.000	69019.0	22110.0
##	69	2.1200 20923	.000	66226.0	21808.0
##	70	2.3300 22713	.000	61085.0	19018.0
##	71	2.3100 23896	.000	55865.0	20418.0
##	72	1.8900 20323	.000	58256.0	20776.0
##	73	2.1300 22160	.000	51203.0	18884.0
	74	2.3900 23541	.000	45911.0	20963.0
##	75	2.0100 20226	.000	49430.0	16692.0
##	76	0.7700 10763	.000	41704.0	11170.0
##	77	-0.2700 54169		146043.0	46752.0
	78	3.2400 59312	.000	138245.0	46327.0
	79	2.0900 48079	.000	93404.0	66064.0
##		1.1505 36330	.000	62060.0	38514.0
##		1.0070 27762	.000	43549.0	30723.0
	82	0.3075 15584	.000	27709.0	18365.0
	83	0.2450 12302		19285.0	17203.0
	84	0.0625 8514		13384.0	12039.0
	85	-0.0260 4924		10741.0	6842.0
	86	0.0295 3998		9746.0	5475.0
	87	-0.0045 2835		8192.0	4180.0
##			Cash	.Flow.from.Financial.Activities	
##		-22354.0		-110749.0	0.8794
##		-14545.0		-93353.0	1.0746
##		-4289.0		-86820.0	1.3636
##		45896.0		-90976.0	1.5401
##		16066.0		-87876.0	1.1329
##		-46446.0		-17974.0	1.2761
##		-45977.0		-20890.0	1.3527
##		-56274.0		-17716.0	1.1088
##		-22579.0		-37549.0	1.0801
	10	-33774.0		-16379.0	1.6786
	11	-48227.0		-1698.0	1.4958
	12	-40419.0		1444.0	1.6084
	13	-13854.0		1257.0	2.0113
##	14	-17434.0		663.0	2.7425

##	15	-22680.0	-43935.0	1.7692
##	16	-30311.0	-58876.0	1.7846
##		-27577.0	-48486.0	2.0800
##		-12223.0	-46031.0	2.5158
##		-15773.0	-36887.0	2.5288
##		-6061.0	-33590.0	2.9008
##		-46781.0	8408.0	2.9186
##		-23950.0	-8393.0	2.3529
##		-23001.0	-9668.0	2.4734
##		-18833.0	-8665.0	2.5040
##		-23811.0	-8148.0	2.7118
##		-24786.0	-9408.0	2.6029
##		-14616.0	-8376.0	2.6037
##		-11314.0	-13291.0	2.1293
##		-15770.0	-7463.0	1.8229
##		-20298.0	-69757.0	2.3780
##		-35523.0	-61362.0	2.9281
##		-32773.0	-24408.0	3.0668
##		-29491.0	-23209.0	3.3741
##		-28504.0	-13179.0	3.9190
##		-31401.0	-8298.0	5.1403
##		-31165.0	-8332.0	6.2908
##		-23711.0	-4225.0	4.6667
##		-21055.0	-2087.0	4.6878
##		-13679.0	-857.0	4.5817
##		-13056.0	1229.0	4.2166
##		-19041.0	807.0	5.9192
##		-10680.0	3050.0	4.1579
##		-8019.0	233.0	10.6178
##		-5149.0	-557.0	1.2218
##		-16545.0	12454.0	1.3264
##		-5742.0	4187.0	1.4300
##		-2678.1	-6580.2	1.4266
##		-2165.7	-5595.6	1.7782
##		-1545.8	-2249.0	1.0100
##		-3071.1	-4994.8	0.9826
##		-2455.1	-5949.6	1.3631
##		562.0	-5310.8	1.8429
##		-981.6	-11262.4	1.3980
##		-1420.0	735.3	3.2684
##		-2304.9	-4618.3	1.5232
##		-2056.0	-3728.7	1.4937
##		7375.0	-11617.0	3.5156
##		-9830.0	1865.0	6.6503
##		-19675.0	3804.0	4.0904
##		6145.0	-792.0	7.6738
##		-4097.0	-2866.0	7.9436
##		-793.0	291.0	4.7740
##		-10477.0	1361.0	1.5676
##		-24449.0	-6045.0	2.1323
##		-21524.0	-12669.0	1.9087
##		-14405.0	-17565.0	1.4002
##		-11239.0	-18607.0	1.7314
##	68	-15762.0	-8475.0	1.6934

```
## 69
                       -25817.0
                                                              -5739.0
                                                                              1.7490
## 70
                        -8183.0
                                                                              2.4492
                                                               1912.0
                                                             -13611.0
## 71
                        -9905.0
                                                                              1.7319
## 72
                       -18073.0
                                                              -5498.0
                                                                              2.3647
## 73
                       -14060.0
                                                              -1408.0
                                                                              2.4312
## 74
                       -10301.0
                                                             -11100.0
                                                                              2.1510
## 75
                       -10539.0
                                                              -4642.0
                                                                              3.3892
## 76
                       -7965.0
                                                              -2568.0
                                                                              2.7871
## 77
                       -37601.0
                                                               9718.0
                                                                              0.9446
## 78
                       -58154.0
                                                               6291.0
                                                                              1.1358
## 79
                       -59611.0
                                                              -1104.0
                                                                              1.0502
## 80
                       -24281.0
                                                             -10066.0
                                                                              1.0970
## 81
                       -12369.0
                                                              -7686.0
                                                                              1.0981
## 82
                                                               9928.0
                       -27084.0
                                                                              1.0400
## 83
                        -9516.0
                                                              -3716.0
                                                                              1.0448
## 84
                        -6450.0
                                                              -3882.0
                                                                              1.0536
## 85
                        -5065.0
                                                                              1.1153
                                                               4432.0
## 86
                        -4276.0
                                                               -539.0
                                                                              1.0716
## 87
                        -3595.0
                                                               2259.0
                                                                              1.1207
##
      Debt.Equity.Ratio
                               ROE
                                        ROA
                                                ROI Net.Profit.Margin
## 1
                 2.3695
                          196.9589 28.2924 66.6994
                                                               25.3096
## 2
                          150.0713 26.9742 54.9839
                                                               25.8818
                 1.9768
## 3
                           87.8664 17.7256 35.0054
                 1.7208
                                                               20.9136
## 4
                           61.0645 16.3230 30.3113
                 1.1940
                                                               21.2381
## 5
                                                               22.4142
                 1.0685
                           55.5601 16.2775 29.6348
## 6
                 0.8630
                           36.0702 12.8826 20.9082
                                                               21.0924
## 7
                           35.6237 14.2024 22.4312
                 0.6786
                                                               21.1868
                           44.7355 18.3899 30.9201
## 8
                 0.5390
                                                               22.8458
## 9
                           35.4201 17.0420 28.1142
                 0.3164
                                                               21.6144
## 10
                 0.1373
                           29.9776 17.8923 26.3592
                                                               21.6705
                           35.3041 23.7033 35.3041
## 11
                 0.0000
                                                               26.6651
## 12
                 0.0000
                           33.8341 22.2753 33.8341
                                                               23.9466
## 13
                 0.0000
                           29.3214 18.6385 29.3214
                                                               21.4841
## 14
                           26.0272 17.3365 26.0272
                 0.0000
                                                               19.1936
## 15
                 0.2291
                           35.0887 17.5644 29.1528
                                                               34.1462
## 16
                           43.6755 19.9370 34.0575
                 0.2989
                                                               36.6863
## 17
                 0.4095
                           43.1522 18.3568 31.9017
                                                               36.4517
## 18
                 0.5353
                           37.4298 14.6961 24.8935
                                                               30.9625
## 19
                 0.7053
                           38.3465 13.6937 23.2200
                                                               31.1817
## 20
                           20.0331 6.4018 10.6937
                 0.9217
                                                               15.0154
## 21
                           29.0602 10.1829 15.5626
                 0.9827
                                                               26.3941
## 22
                 0.7425
                           28.5276 10.6162 18.2481
                                                               22.5322
                           15.2255 6.9885 11.3012
## 23
                 0.4407
                                                               13.0295
## 24
                 0.2522
                           24.5857 12.8051 19.9893
                                                               25.4212
## 25
                 0.1976
                           27.6943 15.3499 23.8822
                                                               28.0839
## 26
                           25.5835 14.0001 22.0276
                                                               23.0295
                 0.1800
## 27
                 0.2088
                           40.5550 21.2964 33.5488
                                                               33.0984
## 28
                           40.6280 21.7853 36.7023
                 0.1286
                                                               30.0237
## 29
                 0.1453
                           36.8295 18.7051 33.6435
                                                               24.9311
## 30
                 0.0574
                           23.4134 16.4188 22.1426
                                                               21.2038
                           30.2156 21.1633 28.5354
## 31
                 0.0589
                                                               29.5117
## 32
                 0.0626
                           18.0949 12.5992 17.0288
                                                               22.0619
## 33
                 0.0226
                           17.0486 12.4472 16.6717
                                                               21.2181
## 34
                 0.0226
                           17.3036 13.2032 16.9214
                                                               22.4647
```

```
## 35
                 0.0260
                            8.3028 6.4178 8.0922
                                                              11.4221
## 36
                 0.0283
                           14.0093 11.6289 13.6237
                                                              21.5770
                           13.5859 11.0863 13.3643
## 37
                 0.0434
                                                              21.1044
## 38
                 0.0504
                           13.1138 10.5429 12.7185
                                                              21.4179
## 39
                 0.0601
                           15.0729 11.8644 14.6965
                                                              22.9345
## 40
                 0.0772
                           16.1096 12.3169 15.4652
                                                              23.3215
## 41
                 0.0723
                           16.7461 13.4167 15.9281
                                                              25.6879
## 42
                 0.0749
                           18.3928 14.7016 18.3928
                                                              29.0065
## 43
                 0.0000
                           18.1091 16.1000 18.1091
                                                              27.5675
## 44
                 0.3705
                           19.1881
                                   5.4998 14.0012
                                                              16.4322
## 45
                 0.4455
                           20.9440
                                    5.9705 14.4887
                                                              19.5861
## 46
                 0.2933
                           14.5254
                                    4.7903 11.2314
                                                              13.8364
## 47
                -5.9805 -102.8983 12.2481 20.6601
                                                              26.6467
## 48
                -7.7424 -163.9903 14.0104 24.3223
                                                              32.4903
## 49
                -4.7848
                          -60.4545 8.9888 17.2823
                                                               24.6280
## 50
                -4.1627
                          -73.3883 12.6822 23.2571
                                                               28.2030
## 51
                         -94.6616 18.0557 23.8720
                -4.9654
                                                              27.8687
## 52
                -9.0381 -158.8832 15.3602 19.7663
                                                              22.7529
## 53
               -11.7750 -212.6069 15.1061 19.7958
                                                              19.0339
## 54
                 3.4033
                           63.9019 11.9385 14.5123
                                                              17.8228
## 55
                 1.1620
                           37.0159 13.9006 17.1211
                                                              17.3381
## 56
                 0.7862
                           33.7996 15.4692 18.9287
                                                              20.5457
## 57
                           19.7638 10.6066 13.7341
                 0.4956
                                                              16.1934
## 58
                           36.6451 22.0698 25.9652
                 0.4113
                                                              36.2339
## 59
                 0.4122
                           25.6438 15.0464 18.9526
                                                              25.9790
## 60
                 0.1631
                           22.9105 16.1479 19.6971
                                                              25.6091
## 61
                 0.2128
                           44.3267 31.1541 36.5490
                                                              35.3448
## 62
                 0.4877
                           28.9136 16.9292 21.4249
                                                               24.1100
## 63
                 0.4071
                            7.7619 4.4025 5.6870
                                                              12.7097
## 64
                 0.3994
                           20.8280 11.7977 15.4134
                                                               25.1417
## 65
                 0.4492
                           25.7891 13.6514 18.1833
                                                               26.8394
## 66
                 0.3742
                           27.1573 15.4171 20.4723
                                                              29.2476
## 67
                 0.3535
                           28.2352 16.4524 21.1246
                                                               29.7157
## 68
                                   7.7899 10.2078
                                                              15.2977
                 0.3885
                           13.9107
## 69
                 0.3818
                           15.5770 9.1029 11.8745
                                                              17.3708
## 70
                           18.6953 11.2558 14.0777
                 0.3711
                                                              20.6305
## 71
                 0.2444
                           20.9505 12.7356 17.2310
                                                              20.9486
## 72
                 0.2308
                           16.5133 10.4160 13.4694
                                                              18.2515
## 73
                 0.2626
                           21.4929 13.0467 17.1047
                                                              20.6314
## 74
                           28.1893 18.1977 24.4212
                 0.1597
                                                              23.9671
## 75
                 0.0428
                           23.1924 18.1433 22.2572
                                                              26.2797
## 76
                 0.0533
                           10.4762 8.2286 9.9856
                                                              12.4377
## 77
                 0.4598
                           -1.8638 -0.5883 -1.2768
                                                              -0.5296
## 78
                 0.3526
                           24.1340
                                   7.9334 17.8428
                                                               7.1014
## 79
                 0.3406
                           22.8374
                                    6.6411 17.0348
                                                               5.5252
## 80
                           18.6723
                 0.3773
                                    5.1446 13.5573
                                                                4.1309
## 81
                 0.5395
                           23.1303
                                    6.1931 15.0245
                                                               4.3253
## 82
                 0.8930
                           10.9459
                                    2.3098
                                            5.7824
                                                                1.7052
## 83
                 0.3990
                           12.2945
                                    2.8429
                                             8.7883
                                                                1.7435
## 84
                 0.6147
                            4.4531
                                    0.9205
                                             2.7579
                                                                0.5570
## 85
                                                               -0.2708
                 0.7695
                           -2.2437 -0.4422 -1.2680
## 86
                 0.3274
                            2.8114 0.6823 2.1180
                                                               0.3680
## 87
                 0.3765
                           -0.4761 -0.1198 -0.3459
                                                               -0.0638
```

Free.Cash.Flow.per.Share Return.on.Tangible.Equity Number.of.Employees

##

## 1	1.3146	196.9589	164000
## 2	1.3261	150.0713	154000
## 3	1.0183	87.8664	147000
## 4	-0.0388	61.0645	137000
## 5	0.7414	55.5601	132000
## 6	0.0330	36.0702	123000
## 7	-0.5901	38.1906	116000
## 8	0.9743	48.3878	110000
## 9	0.3032	38.4380	97000
## 10	0.1363	31.4425	84400
## 11	0.3394	36.9806	76100
## 12	0.6278	35.9115	63300
## 13	0.2857	30.0013	49400
## 14	0.3550	26.4052	36800
## 15	-0.6808	56.1064	221000
## 16	1.2643	82.9207	221000
## 17	1.4887	72.5298	181000
## 18	0.9526	65.2006	163000
## 19	0.7968	74.6661	144000
## 20	0.1317	42.5094	131000
## 21	0.8887	59.9981	124000
## 22	0.2435	40.7585	114000
## 23	-0.3425	20.9110	118000
## 24	0.3152	35.2192	128000
## 25	-0.5456	35.7204	118000
## 26	0.5798	34.1328	128000
## 27	0.3921	52.9046	99000
## 28	0.7057	57.5054	94000
## 29	1.7695	57.5941	90000
## 30	-0.3613	26.6424	190234
## 31	1.7123	33.4561	156500
## 32	0.8430	20.1422	135301
## 33	0.5566	19.2033	118899
## 34	-0.0705	19.5124	98771
## 35	-0.1510	9.5158	80110
## 36	0.6249	16.3323	72053
## 37	0.3054	16.2481	61814
## 38	0.0463	16.2814	53600
## 39	-0.2373	18.8671	47756
## 40	0.1539	21.5120	53861
## 41	0.3039	19.7822	32467
## 42	-0.1195	21.8407	24400
## 43	0.6657	21.4997	19835
## 44	-0.4843	46.6279	30900
## 45	1.7623	42.5304	26500
## 46	-1.0251	24.7409	23200
## 47	-2.1323	-69.3794	150000
## 48	3.3857	-102.1900	200000
## 49	-1.4852	-44.6358	200000
## 50	2.1046	-55.3414	205000
## 51	0.8436	-68.9682	210000
## 52	-0.2793	-91.9365	235000
## 53	-0.2100	-103.2087	375000
## 54	0.9354	99.0748	420000

##	55	0.0221	47.0227	420000
##	56	0.4630	41.0546	400000
##	57	-1.6890	27.2099	26196
##	58	1.3378	48.9460	22473
##	59	0.1419	43.4809	18975
##	60	0.4710	24.2351	13775
##	61	0.1057	47.7129	13277
##	62	0.0975	33.0556	10299
##	63	-4.5640	11.5060	131900
##	64	-2.8278	32.4864	121100
##	65	1.2739	46.4000	110600
##	66	0.7539	52.0977	110800
##	67	0.8946	55.0924	107400
##		-0.3622	30.1113	102700
##		0.1101	24.1972	106000
##		0.3492	24.9236	107300
##		0.0651	28.8574	106700
##		0.4520	22.5859	107600
##		-0.3622	31.2128	105000
##		-0.1314	42.5864	100100
##		0.8374	26.0315	82500
##		1.1789	11.7185	79800
##		-0.2546	-2.1645	1541000
##		-3.9226	27.1530	1608000
##		0.4798	27.2124	1298000
##		0.6220	24.4958	798000
##		1.0975	34.7333	647500
##		-0.2387	21.1226	566000
##		0.3003	15.2958	341400
##		0.5700	6.1922	230800
##		-0.0075	-3.2471	154100
##		0.1748	3.8641	117300
##	81	-0.1833	-0.6915	88400
##	1	Inflation.Rate.in.US.		
	2	8.0028 4.6979		
	3	1.2336		
##		1.8122		
##		2.4426		
##		2.1301		
##		1.2616		
##		0.1186		
##		1.6222		
##		1.4648		
##		2.0693		
##		3.1568		
##		1.6400		
##		-0.3555		
##		3.7000		
##		8.0028		
##		4.6979		
##		1.2336		
##		1.8122		
##	20	2.4426		

## 21	2.1301
## 22	1.2616
## 23	0.1186
## 24	1.6222
## 25	1.4648
## 26	2.0693
## 27	3.1568
## 28	1.6400
## 29	-0.3555
## 30	8.0028
## 31	4.6979
## 32	1.2336
## 33	1.8122
## 34	2.4426
## 35	2.1301
## 36	1.2616
## 37	0.1186
## 38	1.6222
## 39	1.4648
## 40	2.0693
## 41	3.1568
## 42	1.6400
## 43	-0.3555
## 44	4.6979
## 45	1.2336
## 46	1.8122
## 47	8.0028
## 48	4.6979
## 49	1.2336
## 50	1.8122
## 51	2.4426
## 52	2.1301
## 53	1.2616
## 54	0.1186
## 55	1.6222
## 56	1.6400
## 57	3.7000
## 58	8.0028
## 59	4.6979
## 60	1.2336
## 61	1.8122
## 62	2.1301
## 63	8.0028
## 64	4.6979
## 65	1.2336
## 66	1.8122
## 67	2.4426
## 68	2.1301
## 69	1.2616
## 70	0.1186
## 71	1.6222
## 72	1.4648
## 73	2.0693
## 74	3.1568
11 T T	3.1300

```
## 75
                       1.6400
## 76
                      -0.3555
##
  77
                       8.0028
## 78
                       4.6979
##
   79
                       1.2336
## 80
                       1.8122
## 81
                       2.4426
## 82
                       2.1301
## 83
                       1.2616
## 84
                       0.1186
## 85
                       1.6222
## 86
                       1.4648
## 87
                       2.0693
```

3. Arrange by Revenue (descending)

```
arranged_data <- distinct_data %>%
  arrange(desc(Revenue))
cat("Number of rows after arranging:", nrow(arranged_data), "\n")
## Number of rows after arranging: 87
print("Arranged Data:")
## [1] "Arranged Data:"
print(arranged_data)
##
      Year Company Category Market.Cap.in.B.USD.
                                                     Revenue Gross.Profit Net.Income
## 1
      2022
               AMZN
                        LOGI
                                             856.94 513983.0
                                                                               -2722.0
                                                                225152.000
## 2
      2021
               AMZN
                        LOGI
                                            1691.00 469822.0
                                                                197478.000
                                                                               33364.0
## 3
      2022
               AAPL
                          IT
                                            2066.94 394328.0
                                                                170782.000
                                                                               99803.0
## 4
      2020
               AMZN
                        LOGI
                                            1634.16 386064.0
                                                                152757.000
                                                                               21331.0
## 5
      2021
               AAPL
                          IT
                                            2913.28 365817.0
                                                                152836.000
                                                                               94680.0
## 6
      2022
               GOOG
                          IT
                                            1144.35 282836.0
                                                                156633.000
                                                                               59972.0
## 7
      2019
                        LOGI
               AMZN
                                            916.15 280522.0
                                                                114986.000
                                                                               11588.0
## 8
      2020
               AAPL
                          IT
                                            2255.97 274515.0
                                                                104956.000
                                                                               57411.0
## 9
      2018
              AAPL
                          TT
                                             748.54 265595.0
                                                                101839.000
                                                                               59531.0
## 10 2019
               AAPL
                          IT
                                            1304.76 260174.0
                                                                 98392.000
                                                                               55256.0
## 11 2021
               GOOG
                          IT
                                            1910.26 257637.0
                                                                146698.000
                                                                               76033.0
## 12 2015
               AAPL
                          IT
                                             586.86 233715.0
                                                                 93626.000
                                                                               53394.0
## 13 2018
               AMZN
                        LOGI
                                            734.42 232887.0
                                                                 93731.000
                                                                               10073.0
## 14 2017
               AAPL
                          IT
                                            868.87 229234.0
                                                                 88186.000
                                                                               48351.0
## 15 2016
               AAPL
                          IT
                                             617.59 215639.0
                                                                 84263.000
                                                                               45687.0
## 16 2023
              MSFT
                          IT
                                            2451.23 211915.0
                                                                146052.000
                                                                               72361.0
## 17 2022
               MSFT
                          IT
                                            1787.73 198270.0
                                                                135620.000
                                                                               72738.0
## 18 2014
                          ΙT
               AAPL
                                             647.36 182795.0
                                                                 70537.000
                                                                               39510.0
## 19 2020
               GOOG
                          IT
                                            1179.40 182527.0
                                                                 97795.000
                                                                               40269.0
## 20 2017
                        LOGI
                                             563.54 177866.0
                                                                                3033.0
               AMZN
                                                                 65932.000
## 21 2013
               AAPL
                          IT
                                             504.79 170910.0
                                                                 64304.000
                                                                               37037.0
## 22 2021
              MSFT
                          IT
                                            2525.08 168088.0
                                                                115856.000
                                                                               61271.0
## 23 2019
               GOOG
                          IT
                                             917.82 161857.0
                                                                 89961.000
                                                                               34343.0
## 24 2012
               AAPL
                          IT
                                             500.61 156508.0
                                                                 68662.000
                                                                               41733.0
## 25 2020
                          IT
                                            1681.61 143015.0
              MSFT
                                                                 96937.000
                                                                               44281.0
                                            719.63 136819.0
## 26 2018
               GOOG
                          IT
                                                                 77270.000
                                                                               30736.0
```

		2016	AMZN	LOGI		135987.0	47722.000	2371.0
##		2019	MSFT	IT		125843.0	82933.000	39240.0
##	29	2017	GOOG	IT		110855.0	65272.000	12662.0
##	30	2018	MSFT	IT	779.67	110360.0	72007.000	16571.0
##	31	2011	AAPL	IT	376.40	108249.0	43818.000	25922.0
##	32	2015	AMZN	LOGI	316.83	107006.0	35355.000	596.0
##	33	2017	MSFT	IT	659.91	96571.0	62310.000	25489.0
##		2015	MSFT	IT	443.17	93580.0	60542.000	12193.0
##		2016	MSFT	IT	483.16	91154.0	58374.000	20539.0
##		2016	GOOG	IT	530.84	90272.0	55134.000	19478.0
##		2014	AMZN	LOGI	143.70	88988.0	26236.000	-241.0
##		2014	MSFT	IT	382.88	86833.0	59755.000	22074.0
##								
		2021	INTC	ELEC	209.45	79024.0	43815.000	19868.0
##		2020	INTC	ELEC	104.16	77867.0	43612.000	20899.0
##		2013	MSFT	IT	312.30	77849.0	57464.000	21863.0
##		2015	GOOG	IT	521.67	74989.0	46825.000	15826.0
##		2013	AMZN	LOGI	182.54	74452.0	20271.000	274.0
##		2012	MSFT	IT	224.80	73723.0	56193.000	16978.0
##	45	2019	INTC	ELEC	260.35	71965.0	42140.000	21048.0
##	46	2018	INTC	ELEC	214.19	70848.0	43737.000	21053.0
##	47	2011	MSFT	IT	218.38	69943.0	54366.000	23150.0
##	48	2014	GOOG	IT	354.75	66001.0	40310.000	14136.0
##	49	2010	AAPL	IT	296.89	65225.0	25684.000	14013.0
##		2022	INTC	ELEC	109.08	63054.0	26866.000	8014.0
##		2017	INTC	ELEC	216.03	62761.0	39098.000	9601.0
##		2010	MSFT	IT	238.78	62484.0	50089.000	18760.0
##		2012	AMZN	LOGI	113.63	61093.0	15122.000	-39.0
##		2016	INTC	ELEC	171.88	59387.0	36233.000	10316.0
##		2009	MSFT	IT	270.64	58437.0	46282.000	14569.0
##		2014	INTC					
				ELEC	175.46	55870.0	35609.000	11704.0
##		2013	GOOG	IT	371.53	55519.0	33526.000	12733.0
##		2015	INTC	ELEC	162.57	55355.0	34679.000	11420.0
##		2011	INTC	ELEC	123.48	53999.0	33757.000	12942.0
##		2012	INTC	ELEC	102.61	53341.0	33151.000	11005.0
##		2013	INTC	ELEC	129.02	52708.0	31521.000	9620.0
##		2012	GOOG	IT	230.54	46039.0	28863.000	10737.0
		2010	INTC	ELEC	117.31	43623.0	28491.000	11464.0
##	64	2009	AAPL	IT	189.80	42905.0	17222.000	8235.0
##	65	2011	GOOG	IT	207.65	37905.0	24717.000	9737.0
##	66	2009	INTC	ELEC	112.65	35127.0	19561.000	4369.0
##	67	2010	GOOG	IT	188.54	29321.0	18904.000	8505.0
##	68	2014	MCD	FOOD	108.48	27441.3	10455.700	4757.8
##	69	2023	NVDA	ELEC	1000.35	26974.0	15356.000	4368.0
		2022	NVDA	ELEC	359.50	26914.0	17475.000	9752.0
		2015	MCD	FOOD	101.08	25413.0	9789.200	4529.3
		2021	PYPL	FinTech	221.57	25371.0	11921.000	4169.0
		2016	MCD	FOOD	137.21	24621.9	10204.700	4686.5
		2010	MCD	FOOD	102.66	24074.6	9637.300	4946.3
		2009	GOOG	IT	195.27	23651.0	14807.000	6520.0
		2021	MCD	FOOD	193.02	23222.9	12580.200	7545.2
		2022	MCD	FOOD	186.39	23182.6	13207.200	6177.4
		2017	MCD	FOOD	136.89	22820.4	10620.800	5192.3
		2020 2019	PYPL	FinTech	274.41	21454.0	10001.000	4202.0
			MCD	FOOD	159.89	21364.4	11179.400	6025.4

		2018	MCD		700D		148.82	21257.9	10832.600	5924.3
		2020	MCD		F00D		200.31	19207.8	9752.101	4730.5
		2019	PYPL	Fin:			127.01	17772.0	7987.000	2459.0
		2021	NVDA		ELEC		735.86	16675.0	10396.000	4332.0
		2019	NVDA		ELEC		144.00	11716.0	7171.000	4141.0
##	86	2020	NVDA	I	ELEC		323.24	10918.0	6768.000	2796.0
##	87	2017	NVDA	I	ELEC		117.26	6910.0	4063.000	1666.0
##		Earning	.Per.S	hare	EBITDA	Share.			.Flow.from.C	perating
##					54169.000		146	043.0		46752.0
##				2400			138	245.0		46327.0
##	3				130541.000		50	672.0		122151.0
##	4		2.	0900	48079.000		93	404.0		66064.0
##	5		5.	6100	120233.000		63	090.0		104038.0
##	6		4.	5600	90770.000		256	144.0		91495.0
##	7		1.	1505	36330.000		62	060.0		38514.0
##	8		3.	2800	77344.000		65	339.0		80674.0
##	9		2.	9800	81801.000		107	147.0		77434.0
##	10		2.	9700	76477.000		90	488.0		69391.0
##	11		5.	6100	91155.000		251	635.0		91652.0
##	12		2.	3050	82487.000		119	355.0		81266.0
##	13		1.	0070	27762.000		43	549.0		30723.0
##	14			3025	71501.000		134	047.0		64225.0
##	15		2.	0775	70529.000		128	249.0		66231.0
##	16		9.	6800	102384.000		206	223.0		87582.0
##	17		9.	6500	97843.000			542.0		89035.0
##	18		1.	6125	60449.000		111	547.0		59713.0
##	19		2.	9300	54921.000		222	544.0		65124.0
##	20		0.	3075	15584.000		27	709.0		18365.0
##	21		1.	4200	55756.000		123	549.0		53666.0
##	22		8.	0500	81602.000		141	988.0		76740.0
##	23		2.	4580	46012.000		201	442.0		54520.0
##	24			5775	58518.000		118	210.0		50856.0
##	25		5.	7600	65755.000			304.0		60675.0
##	26		2.	1850	36559.000		177	628.0		47971.0
	27			2450	12302.000		19	285.0		17203.0
	28			0600	54641.000			330.0		52185.0
##	29		0.	9000	33093.000		152	502.0		37091.0
	30		2.	1300	45319.000			718.0		43884.0
	31			9886	35604.000			615.0		37529.0
	32			0625	8514.000			384.0		12039.0
	33			2500	37803.000			711.0		39507.0
	34			4800	31616.000			083.0		29668.0
	35			5600	33330.000			997.0		33325.0
	36			3925	29860.000			036.0		36036.0
	37			0260	4924.000			741.0		6842.0
	38			6300	32971.000			784.0		32502.0
	39			8600	31248.000			391.0		29456.0
	40			9400	35917.000			038.0		35864.0
	41			5800	30519.000			944.0		28833.0
	42			1420	24423.000			331.0		26572.0
	43			0295	3998.000			746.0		5475.0
	44			0000	30923.000			363.0		31626.0
	45			7100	32861.000			504.0		33145.0
##	46		4.	4800	32401.000		74	563.0		29432.0

##		2.6900 29927		57083.0		26994.0
##	48	1.0285 21475	.000	103860.0		23024.0
##	49	0.5411 19412	.000	47791.0		18595.0
##	50	1.9400 15369	.000	103286.0		15433.0
##	51	1.9900 26179	.000	69019.0		22110.0
##	52	2.1000 26771	.000	46175.0		24073.0
##	53	-0.0045 2835	.000	8192.0		4180.0
##	54	2.1200 20923	.000	66226.0		21808.0
##	55	1.6200 22925	.000	39558.0		19037.0
##	56	2.3100 23896	.000	55865.0		20418.0
##	57	0.9395 19342	.000	87309.0		18659.0
##	58	2.3300 22713	.000	61085.0		19018.0
##	59	2.3900 23541	.000	45911.0		20963.0
##	60	2.1300 22160	.000	51203.0		18884.0
##	61	1.8900 20323	.000	58256.0		20776.0
##	62	0.8080 16796	.000	71715.0		16619.0
##	63	2.0100 20226	.000	49430.0		16692.0
##	64	0.3243 12474	.000	31640.0		10159.0
##	65	0.7440 13593	.000	58145.0		14565.0
##	66	0.7700 10763	.000	41704.0		11170.0
##	67	0.6578 11777	.000	46241.0		11081.0
##	68	4.8200 9593	.701	12853.4		6730.3
##	69	1.7400 5768	.000	22101.0		5641.0
##	70	3.8500 11215	.000	26612.0		9108.0
##	71	4.8000 8701	.200	7087.9		6539.1
##	72	3.5200 5527	.000	21727.0		5797.0
##	73	5.4400 9261	.002	-2204.3		6059.6
##	74	4.5800 8749	.300	14634.2		6341.6
##	75	0.5103 9836	.000	36004.0		9316.0
##	76	10.0400 12224	.100	-4601.0		9141.5
##	77	8.3300 11241	.600	-6003.4		7386.7
##	78	6.3700 10916	.100	-3268.0		5551.2
##	79	3.5400 4478	.000	20063.0		6219.0
##	80	7.8800 10687	.700	-8210.3		8122.1
##	81	7.5400 10304	.600	-6258.4		6966.7
##	82	6.3100 9075	.400	-7824.9		6265.2
##	83	2.0700 3631	.000	16929.0		4071.0
##	84	1.7300 5630	.000	16893.0		5822.0
##	85	1.6575 4066	.000	9342.0		3743.0
##	86	1.1300 3227	.000	12204.0		4761.0
##	87	0.6425 2121		5762.0		1672.0
##		Cash.Flow.from.Investing	Cash.Flow	.from.Financial.	Activities	Current.Ratio
##	1	-37601.0			9718.0	0.9446
##	2	-58154.0			6291.0	1.1358
##	3	-22354.0			-110749.0	0.8794
##	4	-59611.0			-1104.0	1.0502
##	5	-14545.0			-93353.0	1.0746
##	6	-20298.0			-69757.0	2.3780
##	7	-24281.0			-10066.0	1.0970
##	8	-4289.0			-86820.0	1.3636
##	9	16066.0			-87876.0	1.1329
##	10	45896.0			-90976.0	1.5401
##	11	-35523.0			-61362.0	2.9281
##	12	-56274.0			-17716.0	1.1088

##	13	-12369.0	-7686.0	1.0981
##		-46446.0	-17974.0	1.2761
##		-45977.0	-20890.0	1.3527
##		-22680.0	-43935.0	1.7692
##		-30311.0	-58876.0	1.7846
##	18	-22579.0	-37549.0	1.0801
##	19	-32773.0	-24408.0	3.0668
##		-27084.0	9928.0	1.0400
##		-33774.0	-16379.0	1.6786
##		-27577.0	-48486.0	2.0800
##		-29491.0	-23209.0	3.3741
##		-48227.0	-1698.0	1.4958
##		-12223.0	-46031.0	2.5158
##		-28504.0	-13179.0	3.9190
##		-9516.0	-3716.0	1.0448
##		-15773.0	-36887.0	2.5288
##		-31401.0	-8298.0	5.1403
##		-6061.0	-33590.0	2.9008
##		-40419.0	1444.0	1.6084
##		-6450.0	-3882.0	1.0536
##		-46781.0	8408.0	2.9186
##		-23001.0	-9668.0	2.4734
##		-23950.0	-8393.0	2.3529
##		-31165.0	-8332.0	6.2908
##		-5065.0	4432.0	1.1153
##		-18833.0	-8665.0	2.5040
##		-24449.0	-6045.0	2.1323
##		-21524.0	-12669.0	1.9087
##		-23811.0	-8148.0	2.7118
##		-23711.0	-4225.0	4.6667
##		-4276.0	-539.0	1.0716
##		-24786.0	-9408.0	2.6029
##		-14405.0	-17565.0	1.4002
##		-11239.0	-18607.0	1.7314
##		-14616.0	-8376.0	2.6037
##		-21055.0	-2087.0	4.6878
##		-13854.0	1257.0	2.0113
##		-10477.0	1361.0	1.5676
##		-15762.0	-8475.0	1.6934
##		-11314.0	-13291.0	2.1293
##		-3595.0	2259.0	1.1207
##		-25817.0	-5739.0	1.7490
##		-15770.0	-7463.0	1.8229
##		-9905.0	-13611.0	1.7319
##		-13679.0	-857.0	4.5817
##		-8183.0	1912.0	2.4492
##		-10301.0	-11100.0	2.1510
##		-14060.0	-1408.0	2.4312
##		-18073.0	-5498.0	2.3647
##		-13056.0	1229.0	4.2166
##		-10539.0	-4642.0	3.3892
##		-17434.0	663.0	2.7425
##		-19041.0	807.0	5.9192
##	66	-7965.0	-2568.0	2.7871

```
## 67
                       -10680.0
                                                               3050.0
                                                                              4.1579
## 68
                        -2304.9
                                                              -4618.3
                                                                              1.5232
## 69
                         7375.0
                                                             -11617.0
                                                                              3.5156
## 70
                        -9830.0
                                                                              6.6503
                                                               1865.0
## 71
                        -1420.0
                                                                735.3
                                                                              3.2684
## 72
                       -5149.0
                                                               -557.0
                                                                              1.2218
## 73
                         -981.6
                                                             -11262.4
                                                                              1.3980
## 74
                        -2056.0
                                                              -3728.7
                                                                              1.4937
## 75
                        -8019.0
                                                                233.0
                                                                             10.6178
## 76
                        -2165.7
                                                              -5595.6
                                                                              1.7782
## 77
                        -2678.1
                                                              -6580.2
                                                                              1.4266
## 78
                          562.0
                                                              -5310.8
                                                                              1.8429
## 79
                       -16545.0
                                                              12454.0
                                                                              1.3264
## 80
                       -3071.1
                                                              -4994.8
                                                                              0.9826
## 81
                        -2455.1
                                                              -5949.6
                                                                              1.3631
## 82
                        -1545.8
                                                              -2249.0
                                                                              1.0100
## 83
                        -5742.0
                                                               4187.0
                                                                              1.4300
## 84
                       -19675.0
                                                               3804.0
                                                                              4.0904
## 85
                        -4097.0
                                                              -2866.0
                                                                              7.9436
## 86
                         6145.0
                                                               -792.0
                                                                              7.6738
## 87
                         -793.0
                                                                291.0
                                                                              4.7740
      Debt.Equity.Ratio
                                                ROI Net.Profit.Margin
##
                               ROE
                                        ROA
                           -1.8638 -0.5883 -1.2768
## 1
                 0.4598
                                                               -0.5296
## 2
                                   7.9334 17.8428
                 0.3526
                           24.1340
                                                                7.1014
## 3
                          196.9589 28.2924 66.6994
                 2.3695
                                                               25.3096
                 0.3406
                           22.8374 6.6411 17.0348
                                                                5.5252
## 5
                          150.0713 26.9742 54.9839
                                                               25.8818
                  1.9768
                           23.4134 16.4188 22.1426
## 6
                 0.0574
                                                               21.2038
## 7
                           18.6723 5.1446 13.5573
                 0.3773
                                                                4.1309
## 8
                 1.7208
                           87.8664 17.7256 35.0054
                                                               20.9136
## 9
                 1.0685
                           55.5601 16.2775 29.6348
                                                               22.4142
## 10
                 1.1940
                           61.0645 16.3230 30.3113
                                                               21.2381
## 11
                 0.0589
                           30.2156 21.1633 28.5354
                                                               29.5117
                           44.7355 18.3899 30.9201
## 12
                 0.5390
                                                               22.8458
## 13
                 0.5395
                           23.1303 6.1931 15.0245
                                                                4.3253
## 14
                           36.0702 12.8826 20.9082
                 0.8630
                                                               21.0924
## 15
                 0.6786
                           35.6237 14.2024 22.4312
                                                               21.1868
## 16
                 0.2291
                           35.0887 17.5644 29.1528
                                                               34.1462
## 17
                 0.2989
                           43.6755 19.9370 34.0575
                                                               36.6863
## 18
                           35.4201 17.0420 28.1142
                 0.3164
                                                               21.6144
## 19
                           18.0949 12.5992 17.0288
                 0.0626
                                                               22.0619
## 20
                 0.8930
                           10.9459 2.3098 5.7824
                                                                1.7052
## 21
                 0.1373
                           29.9776 17.8923 26.3592
                                                               21.6705
## 22
                 0.4095
                           43.1522 18.3568 31.9017
                                                               36.4517
## 23
                 0.0226
                           17.0486 12.4472 16.6717
                                                               21.2181
## 24
                           35.3041 23.7033 35.3041
                 0.0000
                                                               26.6651
## 25
                 0.5353
                           37.4298 14.6961 24.8935
                                                               30.9625
## 26
                 0.0226
                           17.3036 13.2032 16.9214
                                                               22.4647
## 27
                 0.3990
                           12.2945
                                   2.8429 8.7883
                                                                1.7435
## 28
                 0.7053
                           38.3465 13.6937 23.2200
                                                               31.1817
## 29
                            8.3028 6.4178 8.0922
                 0.0260
                                                               11.4221
## 30
                 0.9217
                           20.0331 6.4018 10.6937
                                                               15.0154
## 31
                 0.0000
                           33.8341 22.2753 33.8341
                                                               23.9466
## 32
                 0.6147
                            4.4531 0.9205 2.7579
                                                                0.5570
```

##	33	0.9827	29.0602	10.1829	15.5626	26.394
##	34	0.4407	15.2255	6.9885	11.3012	13.029
##	35	0.7425	28.5276	10.6162	18.2481	22.532
##	36	0.0283	14.0093	11.6289	13.6237	21.5770
##	37	0.7695	-2.2437	-0.4422	-1.2680	-0.2708
##	38	0.2522	24.5857	12.8051	19.9893	25.4212
##	39	0.3994	20.8280	11.7977	15.4134	25.141
##	40	0.4492	25.7891	13.6514	18.1833	26.8394
##	41	0.1976	27.6943	15.3499	23.8822	28.0839
##	42	0.0434	13.5859	11.0863	13.3643	21.104
##	43	0.3274	2.8114	0.6823	2.1180	0.3680
##	44	0.1800	25.5835	14.0001	22.0276	23.029
##	45	0.3742	27.1573	15.4171	20.4723	29.2476
##	46	0.3535	28.2352	16.4524	21.1246	29.715
##	47	0.2088	40.5550	21.2964	33.5488	33.0984
##	48	0.0504	13.1138	10.5429	12.7185	21.4179
##	49	0.0000	29.3214	18.6385	29.3214	21.484
##	50	0.4071	7.7619	4.4025	5.6870	12.709
##	51	0.3885	13.9107	7.7899	10.2078	15.297
##	52	0.1286	40.6280	21.7853	36.7023	30.023
##	53	0.3765	-0.4761	-0.1198	-0.3459	-0.0638
##	54	0.3818	15.5770	9.1029	11.8745	17.3708
##	55	0.1453	36.8295	18.7051	33.6435	24.931
##	56	0.2444	20.9505	12.7356	17.2310	20.9486
##	57	0.0601	15.0729	11.8644	14.6965	22.934
##	58	0.3711	18.6953	11.2558	14.0777	20.630
##	59	0.1597	28.1893	18.1977	24.4212	23.967
##	60	0.2626	21.4929	13.0467	17.1047	20.6314
##	61	0.2308	16.5133	10.4160	13.4694	18.251
##	62	0.0772	16.1096	12.3169	15.4652	23.321
##	63	0.0428	23.1924	18.1433	22.2572	26.279
##	64	0.0000	26.0272	17.3365	26.0272	19.1936
##	65	0.0723	16.7461	13.4167	15.9281	25.6879
##	66	0.0533	10.4762	8.2286	9.9856	12.437
##	67	0.0749	18.3928	14.7016	18.3928	29.006
	68	1.1620		13.9006		17.338
##		0.4956		10.6066		16.193
##		0.4113		22.0698		36.2339
	71	3.4033		11.9385		17.8228
	72	0.3705		5.4998		16.4322
			-212.6069			19.0339
	74	0.7862		15.4692		20.545
##		0.0000		16.1000		27.567
##			-163.9903			32.490
##			-102.8983			26.646
##			-158.8832			22.7529
##		0.4455			14.4887	19.586
##		-4.1627				28.2030
##		-4.9654				27.868
	82	-4.7848				24.6280
##		0.2933			11.2314	13.8364
##		0.4122		15.0464		25.9790
##		0.2128		31.1541		35.3448
##	86	0.1631	22.9105	16.1479	19.6971	25.609

##	87	0.4877 28.91	136 16.9292 21.4249	24.1100
##	01		Return.on.Tangible.Equity	
##	1	-0.2546	-2.1645	1541000
##		-3.9226	27.1530	1608000
##		1.3146	196.9589	164000
##		0.4798	27.2124	1298000
##		1.3261	150.0713	154000
##		-0.3613	26.6424	190234
##		0.6220	24.4958	798000
##		1.0183	87.8664	147000
##		0.7414	55.5601	132000
##		-0.0388	61.0645	137000
	11	1.7123	33.4561	156500
##	12	0.9743	48.3878	110000
	13	1.0975	34.7333	647500
##	14	0.0330	36.0702	123000
##	15	-0.5901	38.1906	116000
##	16	-0.6808	56.1064	221000
##	17	1.2643	82.9207	221000
##	18	0.3032	38.4380	97000
##	19	0.8430	20.1422	135301
##	20	-0.2387	21.1226	566000
##	21	0.1363	31.4425	84400
##	22	1.4887	72.5298	181000
##	23	0.5566	19.2033	118899
##	24	0.3394	36.9806	76100
##		0.9526	65.2006	163000
##		-0.0705	19.5124	98771
##		0.3003	15.2958	341400
##		0.7968	74.6661	144000
##		-0.1510	9.5158	80110
##		0.1317	42.5094	131000
##		0.6278	35.9115	63300
##		0.5700	6.1922	230800
##		0.8887	59.9981	124000
##		-0.3425	20.9110	118000
##		0.2435	40.7585	114000
## ##		0.6249	16.3323 -3.2471	72053 154100
##		-0.0075 0.3152	35.2192	128000
##		-2.8278	32.4864	121100
##		1.2739	46.4000	110600
##		-0.5456	35.7204	118000
##		0.3054	16.2481	61814
##		0.1748	3.8641	117300
##		0.5798	34.1328	128000
##		0.7539	52.0977	110800
##		0.8946	55.0924	107400
##		0.3921	52.9046	99000
##		0.0463	16.2814	53600
##		0.2857	30.0013	49400
##		-4.5640	11.5060	131900
##		-0.3622	30.1113	102700
##		0.7057	57.5054	94000

##	53	-0.1833	-0.6915	88400
##		0.1101	24.1972	106000
##		1.7695	57.5941	90000
##		0.0651	28.8574	106700
##		-0.2373	18.8671	47756
##		0.3492	24.9236	107300
##		-0.1314	42.5864	100100
##		-0.3622	31.2128	105000
##		0.4520	22.5859	107600
##	62	0.1539	21.5120	53861
##	63	0.8374	26.0315	82500
##	64	0.3550	26.4052	36800
##	65	0.3039	19.7822	32467
##	66	1.1789	11.7185	79800
##	67	-0.1195	21.8407	24400
##	68	0.0221	47.0227	420000
##	69	-1.6890	27.2099	26196
##		1.3378	48.9460	22473
##		0.9354	99.0748	420000
##		-0.4843	46.6279	30900
##		-0.2100	-103.2087	375000
##		0.4630	41.0546	400000
##		0.6657	21.4997	19835
##		3.3857	-102.1900	200000
##		-2.1323	-69.3794	150000
##		-0.2793	-91.9365	235000
##		1.7623	42.5304	26500
##		2.1046	-55.3414	205000
##		0.8436	-68.9682	210000
##		-1.4852	-44.6358	200000
## ##		-1.0251	24.7409	23200
##		0.1419 0.1057	43.4809 47.7129	18975 13277
##		0.1057	24.2351	13775
##		0.4710	33.0556	10299
##	01	Inflation.Rate.in.US.	33.0000	10233
##	1	8.0028		
##	_	4.6979		
##		8.0028		
##		1.2336		
##		4.6979		
##		8.0028		
##	7	1.8122		
##	8	1.2336		
##	9	2.4426		
##	10	1.8122		
##	11	4.6979		
##	12	0.1186		
##	13	2.4426		
##	14	2.1301		
##		1.2616		
##		3.7000		
##		8.0028		
##	18	1.6222		

## 19	1.2336
## 20	2.1301
## 21	1.4648
## 22	4.6979
## 23	1.8122
## 24	2.0693
## 25	1.2336
## 26	2.4426
## 27	1.2616
## 28	1.8122
	2.1301
	2.4426
## 31	3.1568
## 32	0.1186
## 33	2.1301
## 34	0.1186
## 35	1.2616
## 36	1.2616
## 37	1.6222
## 38	1.6222
## 39	4.6979
## 40	1.2336
## 41	1.4648
## 42	0.1186
## 43	1.4648
## 44	2.0693
## 45	1.8122
## 46	2.4426
	3.1568
## 48	1.6222
## 49	1.6400
## 50	8.0028
## 51	2.1301
## 52	1.6400
## 53	2.0693
## 54	1.2616
## 55	-0.3555
## 56	1.6222
## 57	1.4648
## 58	0.1186
## 59	3.1568
## 60	2.0693
## 61	1.4648
## 62	2.0693
## 63	1.6400
## 64	-0.3555
## 65	3.1568
## 66	-0.3555
## 67	1.6400
## 68	1.6222
## 69	3.7000
## 70	8.0028
## 71 ## 72	0.1186
## 72	4.6979

```
## 73
                       1.2616
## 74
                       1.6400
## 75
                      -0.3555
## 76
                       4.6979
## 77
                       8.0028
## 78
                       2.1301
## 79
                       1.2336
## 80
                       1.8122
## 81
                       2.4426
## 82
                       1.2336
## 83
                       1.8122
                       4.6979
## 84
## 85
                       1.8122
## 86
                       1.2336
## 87
                       2.1301
```

4. Group by Category and summarize the average revenue

```
summary_data <- arranged_data %>%
  group_by(Category) %>%
  summarise(Average_Revenue = mean(Revenue, na.rm = TRUE))
cat("Number of rows in summary data:", nrow(summary_data), "\n")
## Number of rows in summary data: 5
print("Summary Data:")
## [1] "Summary Data:"
print(summary_data)
## # A tibble: 5 x 2
     Category Average_Revenue
##
     <chr>>
                         <dbl>
## 1 ELEC
                        46752.
## 2 FOOD
                       23261.
## 3 FinTech
                       21532.
## 4 IT
                       143951.
## 5 LOGI
                      229879.
```

5. Unique values

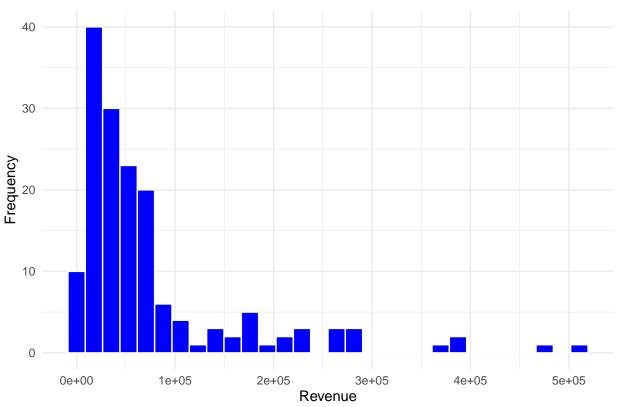
```
unique(data$Market.Cap.in.B.USD.)
     [1] 2066.94 2913.28 2255.97 1304.76
                                           748.54
                                                    868.87
                                                            617.59
                                                                    586.86
##
                                                                             647.36
    [10]
##
         504.79 500.61 376.40 296.89
                                           189.80 2451.23 1787.73 2525.08 1681.61
    [19] 1203.06
                  779.67
                          659.91
                                  483.16
                                           443.17
                                                    382.88
                                                            312.30
                                                                     224.80
                                                                             218.38
##
    [28]
          238.78
                  270.64 1144.35 1910.26 1179.40
                                                    917.82
                                                            719.63
                                                                     726.47
                                                                             530.84
##
    [37]
          521.67
                  354.75
                          371.53
                                  230.54
                                           207.65
                                                    188.54
                                                            195.27
                                                                      81.19
                                                                             221.57
                  127.01
                            99.09
                                    88.48
                                            47.63
                                                                      46.99
##
   [46]
          274.41
                                                     44.23
                                                                NA
                                                                              47.21
##
    [55]
           32.62
                   44.65
                            34.86
                                    53.56
                                            67.08
                                                     76.66
                                                             78.41
                                                                      75.16
                                                                              52.11
##
    [64]
           44.06
                    7.79
                             4.04
                                    41.28
                                            32.20
                                                     24.10
                                                             24.73
                                                                      5.75
                                                                              12.32
##
    [73]
           23.06
                   30.73
                            26.09
                                    25.29
                                             18.10
                                                     17.14
                                                             16.73
                                                                      18.76
                                                                               0.04
    [82]
            0.37
                    1.11
                             2.19
                                     3.51
                                             4.90
                                                      4.47
                                                              3.39
                                                                      8.22
                                                                               8.98
```

```
## [91] 186.39 193.02 200.31 159.89
                                        148.82 136.89
                                                         137.21 101.08
## [100]
          91.19
                  96.55
                          88.56 102.66
                                          81.10
                                                  32.53
                                                          43.60
                                                                  34.66
                                                                          40.78
                                          60.47
## [109]
          31.68
                  45.79
                          46.21
                                  53.45
                                                  55.49
                                                          52.82
                                                                  33.47
                                                                          47.13
          36.84 1000.35 359.50 735.86
                                                 144.00
                                                          81.44
                                                                 117.26
                                                                          57.53
## [118]
                                         323.24
## [127]
          17.73
                  10.90
                           9.11
                                   7.66
                                           8.46
                                                   8.95
                                                          10.37
                                                                 109.08
                                                                         209.45
## [136]
        104.16 260.35
                        214.19 216.03
                                        171.88
                                                162.57
                                                         175.46
                                                                129.02
                                                                        102.61
         123.48
                 117.31
                        112.65 856.94 1691.00 1634.16
                                                         916.15
                                                                734.42
## [145]
## [154] 356.31 316.83 143.70 182.54 113.63
                                                  78.72
                                                          80.79
                                                                  58.24
```

DATA VISUALISATION IN R

1. Histogram: Distribution of Revenue

Distribution of Revenue

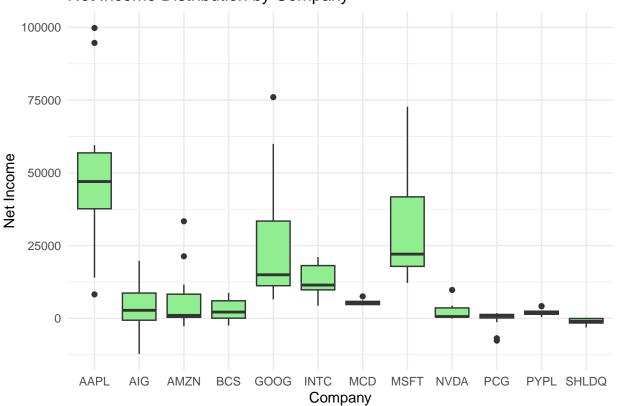


2. Box Plot: Net Income by Company

```
ggplot(data, aes(x = Company, y = Net.Income)) +
  geom_boxplot(fill = "lightgreen") +
  labs(title = "Net Income Distribution by Company",
```

```
x = "Company",
y = "Net Income") +
theme(axis.text.x = element_text(angle = 45, hjust = 1)) +
theme_minimal()
```

Net Income Distribution by Company

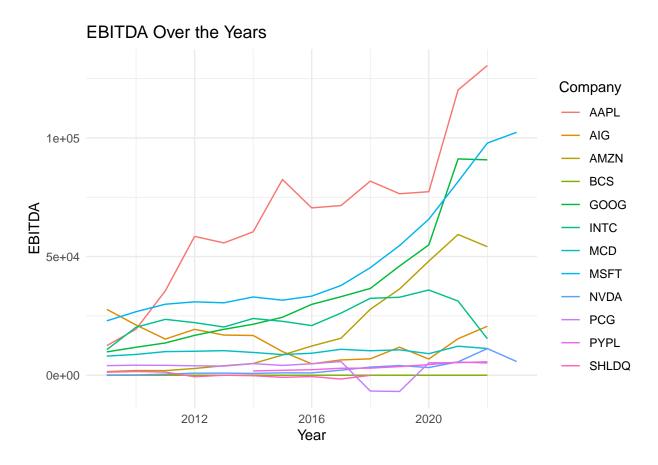


3. Scatter Plot: Revenue vs. Gross Profit

`geom_smooth()` using formula = 'y ~ x'



4. Line Plot: EBITDA Over the Years



5. Bar Plot: Average Earnings Per Share by Company

