Name → Shivansh Joshi Sem → 1st

Father's Name → J.N Joshi Sec → A

University RNO → 2101205 Class RNO → 56

Ans 3 → Analyzing dataset using R

- setting of coorking directory

```
setwd ("C:/Users/Shivansh/Desktop")
```

- installing dplyr package

```
install.packages ("dplyr").
```

- importing library

```
library (dplyr)
```

- reading .csv file

```
mydata ← read.csv ("NIFTY-50-27-DEC-2021.csv")
```

- displaying columns name of given dataset

```
names(mydata)
```

- finding minimum value from OPEN column

```
min(mydata$OPEN.)
```

- finding maximum value from OPEN column

```
max(mydata$OPEN..)
```

Shivansh

- Calculating mean value of CHNGr column

  mean(mydata $ CHNGr..)

- calculating median value of OPEN column

  median(mydata $OPEN..).

- Quantile function.

  quantile(mydata $CHNGr..,0.75)

- sd function (computing standard deviation of CHNGr column)

  sd(mydata $CHNGr..)

- var function.(computing variance of CHNGr column)

  var(mydata $CHNGr..)

- str function (displaying internal structure of dataset)

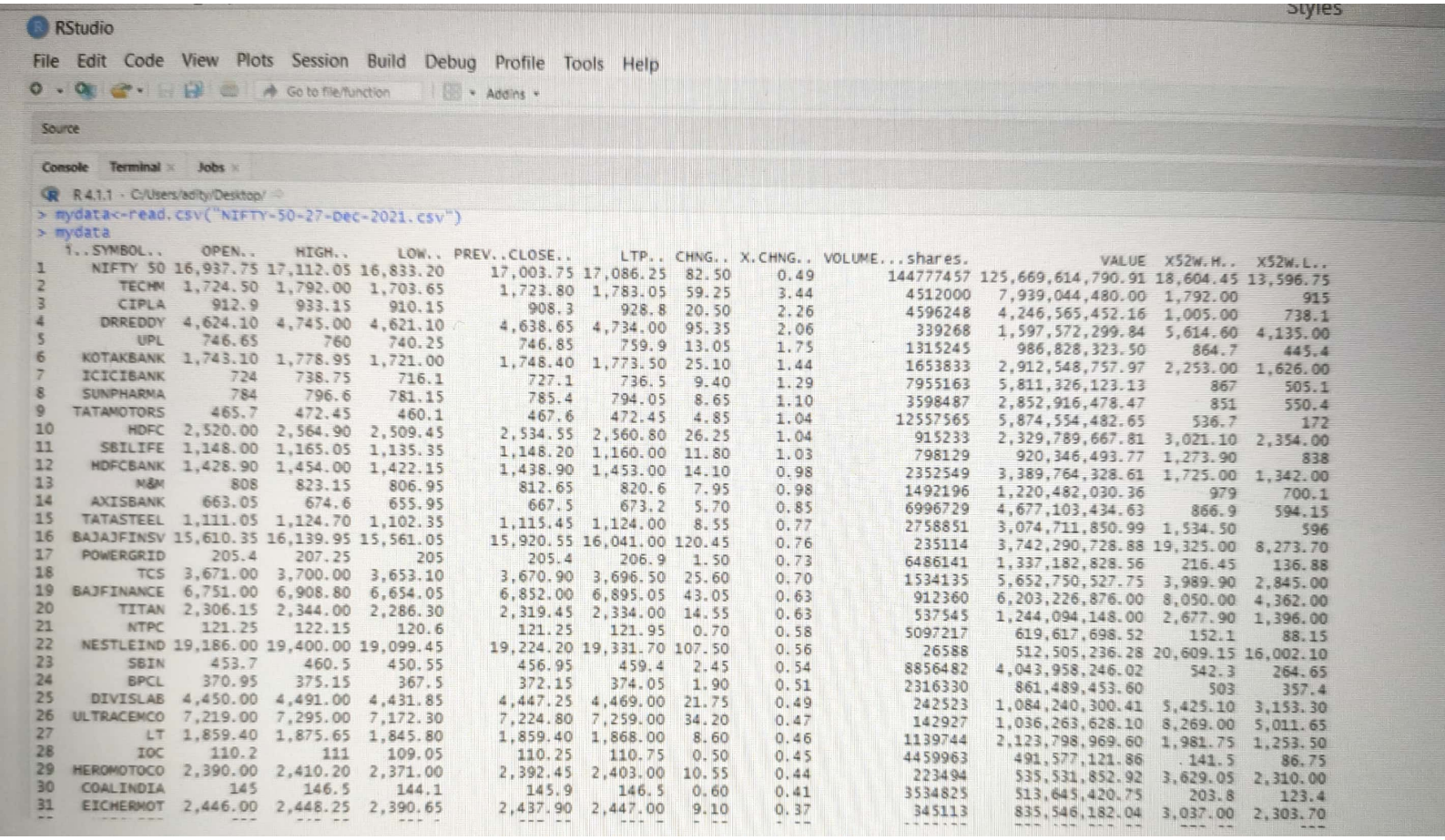
  str(mydata)

- dim function (displaying dimension of dataset)

  dim(mydata)

- summary function (provides summary data related)

  Summary(mydata)



RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function · Addins

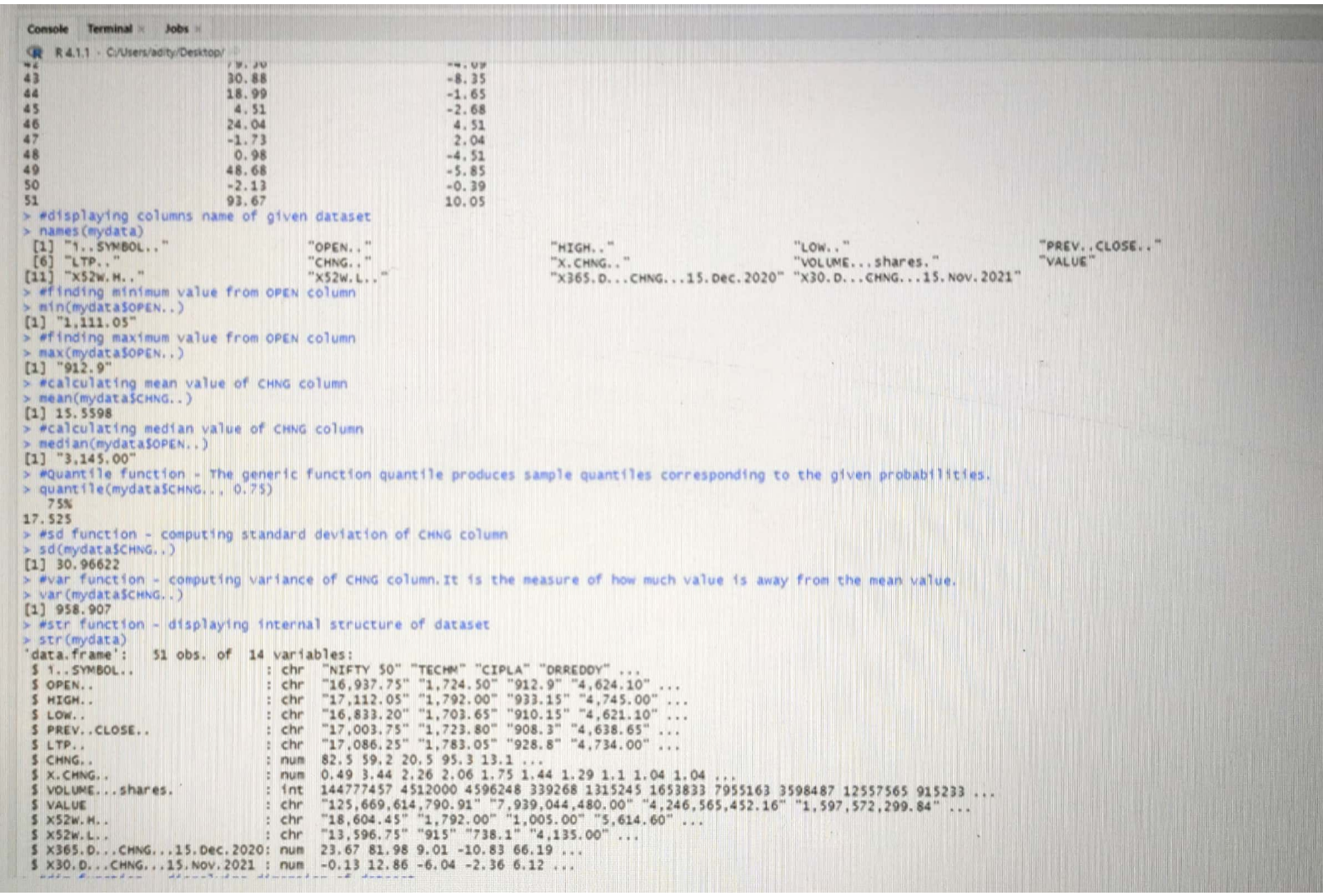
Source

Console Terminal Jobs

R 4.1.1 · C:/Users/adity/Desktop/

```
> mydata<-read.csv("NIFTY-50-27-Dec-2021.csv")
> mydata
```

	1..SYMBOL..	OPEN..	HIGH..	LOW..	PREV..CLOSE..	LTP..	CHNG..	X.CHNG..	VOLUME...shares.	VALUE	X52W.H..	X52W.L..
1	NIFTY 50	16,937.75	17,112.05	16,833.20	17,003.75	17,086.25	82.50	0.49	144777457	125,669,614,790.91	18,604.45	13,596.75
2	TECHM	1,724.50	1,792.00	1,703.65	1,723.80	1,783.05	59.25	3.44	4512000	7,939,044,480.00	1,792.00	915
3	CIPLA	912.9	933.15	910.15	908.3	928.8	20.50	2.26	4596248	4,246,565,452.16	1,005.00	738.1
4	DRREDDY	4,624.10	4,745.00	4,621.10	4,638.65	4,734.00	95.35	2.06	339268	1,597,572,299.84	5,614.60	4,135.00
5	UPL	746.65	760	740.25	746.85	759.9	13.05	1.75	1315245	986,828,323.50	864.7	445.4
6	KOTAKBANK	1,743.10	1,778.95	1,721.00	1,748.40	1,773.50	25.10	1.44	1653833	2,912,548,757.97	2,253.00	1,626.00
7	ICICIBANK	724	738.75	716.1	727.1	736.5	9.40	1.29	7955163	5,811,326,123.13	867	505.1
8	SUNPHARMA	784	796.6	781.15	785.4	794.05	8.65	1.10	3598487	2,852,916,478.47	851	550.4
9	TATAMOTORS	465.7	472.45	460.1	467.6	472.45	4.85	1.04	12557565	5,874,554,482.65	536.7	172
10	HDFC	2,520.00	2,564.90	2,509.45	2,534.55	2,560.80	26.25	1.04	915233	2,329,789,667.81	3,021.10	2,354.00
11	SBILIFE	1,148.00	1,165.05	1,135.35	1,148.20	1,160.00	11.80	1.03	798129	920,346,493.77	1,273.90	838
12	HDFCBANK	1,428.90	1,454.00	1,422.15	1,438.90	1,453.00	14.10	0.98	2352549	3,389,764,328.61	1,725.00	1,342.00
13	M&M	808	823.15	806.95	812.65	820.6	7.95	0.98	1492196	1,220,482,030.36	979	700.1
14	AXISBANK	663.05	674.6	655.95	667.5	673.2	5.70	0.85	6996729	4,677,103,434.63	866.9	594.15
15	TATASTEEL	1,111.05	1,124.70	1,102.35	1,115.45	1,124.00	8.55	0.77	2758851	3,074,711,850.99	1,534.50	596
16	BAJAJFINSV	15,610.35	16,139.95	15,561.05	15,920.55	16,041.00	120.45	0.76	235114	3,742,290,728.88	19,325.00	8,273.70
17	POWERGRID	205.4	207.25	205	205.4	206.9	1.50	0.73	6486141	1,337,182,828.56	216.45	136.88
18	TCS	3,671.00	3,700.00	3,653.10	3,670.90	3,696.50	25.60	0.70	1534135	5,652,750,527.75	3,989.90	2,845.00
19	BAJFINANCE	6,751.00	6,908.80	6,654.05	6,852.00	6,895.05	43.05	0.63	912360	6,203,226,876.00	8,050.00	4,362.00
20	TITAN	2,306.15	2,344.00	2,286.30	2,319.45	2,334.00	14.55	0.63	537545	1,244,094,148.00	2,677.90	1,396.00
21	NTPC	121.25	122.15	120.6	121.25	121.95	0.70	0.58	5097217	619,617,698.52	152.1	88.15
22	NESTLEIND	19,186.00	19,400.00	19,099.45	19,224.20	19,331.70	107.50	0.56	26588	512,505,236.28	20,609.15	16,002.10
23	SBIN	453.7	460.5	450.55	456.95	459.4	2.45	0.54	8856482	4,043,958,246.02	542.3	264.65
24	BPCL	370.95	375.15	367.5	372.15	374.05	1.90	0.51	2316330	861,489,453.60	503	357.4
25	DIVISLAB	4,450.00	4,491.00	4,431.85	4,447.25	4,469.00	21.75	0.49	242523	1,084,240,300.41	5,425.10	3,153.30
26	ULTRACEMCO	7,219.00	7,295.00	7,172.30	7,224.80	7,259.00	34.20	0.47	142927	1,036,263,628.10	8,269.00	5,011.65
27	LT	1,859.40	1,875.65	1,845.80	1,859.40	1,868.00	8.60	0.46	1139744	2,123,798,969.60	1,981.75	1,253.50
28	IOC	110.2	111	109.05	110.25	110.75	0.50	0.45	4459963	491,577,121.86	141.5	86.75
29	HEROMOTOCO	2,390.00	2,410.20	2,371.00	2,392.45	2,403.00	10.55	0.44	223494	535,531,852.92	3,629.05	2,310.00
30	COALINDIA	145	146.5	144.1	145.9	146.5	0.60	0.41	3534825	513,645,420.75	203.8	123.4
31	EICHERMOT	2,446.00	2,448.25	2,390.65	2,437.90	2,447.00	9.10	0.37	345113	835,546,182.04	3,037.00	2,303.70



```
Console   Terminal   Jobs
R 4.1.1 · C:/Users/adity/Desktop/
42                    79.20                    -4.09
43                    30.88                    -8.35
44                    18.99                    -1.65
45                     4.51                    -2.68
46                    24.04                     4.51
47                    -1.73                     2.04
48                     0.98                    -4.51
49                    48.68                    -5.85
50                    -2.13                    -0.39
51                    93.67                    10.05
> #displaying columns name of given dataset
> names(mydata)
 [1] "i..SYMBOL.."                "OPEN.."                     "HIGH.."                     "LOW.."                      "PREV..CLOSE.."
 [6] "LTP.."                      "CHNG.."                     "X.CHNG.."                   "VOLUME...shares."           "VALUE"
[11] "X52W.H.."                   "X52W.L.."                   "X365.D...CHNG...15.Dec.2020" "X30.D...CHNG...15.Nov.2021"
> #finding minimum value from OPEN column
> min(mydata$OPEN..)
[1] "1,111.05"
> #finding maximum value from OPEN column
> max(mydata$OPEN..)
[1] "912.9"
> #calculating mean value of CHNG column
> mean(mydata$CHNG..)
[1] 15.5598
> #calculating median value of CHNG column
> median(mydata$OPEN..)
[1] "3,145.00"
> #Quantile function - The generic function quantile produces sample quantiles corresponding to the given probabilities.
> quantile(mydata$CHNG.., 0.75)
   75%
17.525
> #sd function - computing standard deviation of CHNG column
> sd(mydata$CHNG..)
[1] 30.96622
> #var function - computing variance of CHNG column.It is the measure of how much value is away from the mean value.
> var(mydata$CHNG..)
[1] 958.907
> #str function - displaying internal structure of dataset
> str(mydata)
'data.frame':   51 obs. of  14 variables:
 $ i..SYMBOL..                : chr  "NIFTY 50" "TECHM" "CIPLA" "DRREDDY" ...
 $ OPEN..                     : chr  "16,937.75" "1,724.50" "912.9" "4,624.10" ...
 $ HIGH..                     : chr  "17,112.05" "1,792.00" "933.15" "4,745.00" ...
 $ LOW..                      : chr  "16,833.20" "1,703.65" "910.15" "4,621.10" ...
 $ PREV..CLOSE..              : chr  "17,003.75" "1,723.80" "908.3" "4,638.65" ...
 $ LTP..                      : chr  "17,086.25" "1,783.05" "928.8" "4,734.00" ...
 $ CHNG..                     : num  82.5 59.2 20.5 95.3 13.1 ...
 $ X.CHNG..                   : num  0.49 3.44 2.26 2.06 1.75 1.44 1.29 1.1 1.04 1.04 ...
 $ VOLUME...shares.           : int  144777457 4512000 4596248 339268 1315245 1653833 7955163 3598487 12557565 915233 ...
 $ VALUE                      : chr  "125,669,614,790.91" "7,939,044,480.00" "4,246,565,452.16" "1,597,572,299.84" ...
 $ X52W.H..                   : chr  "18,604.45" "1,792.00" "1,005.00" "5,614.60" ...
 $ X52W.L..                   : chr  "13,596.75" "915" "738.1" "4,135.00" ...
 $ X365.D...CHNG...15.Dec.2020: num  23.67 81.98 9.01 -10.83 66.19 ...
 $ X30.D...CHNG...15.Nov.2021 : num  -0.13 12.86 -6.04 -2.36 6.12 ...
```