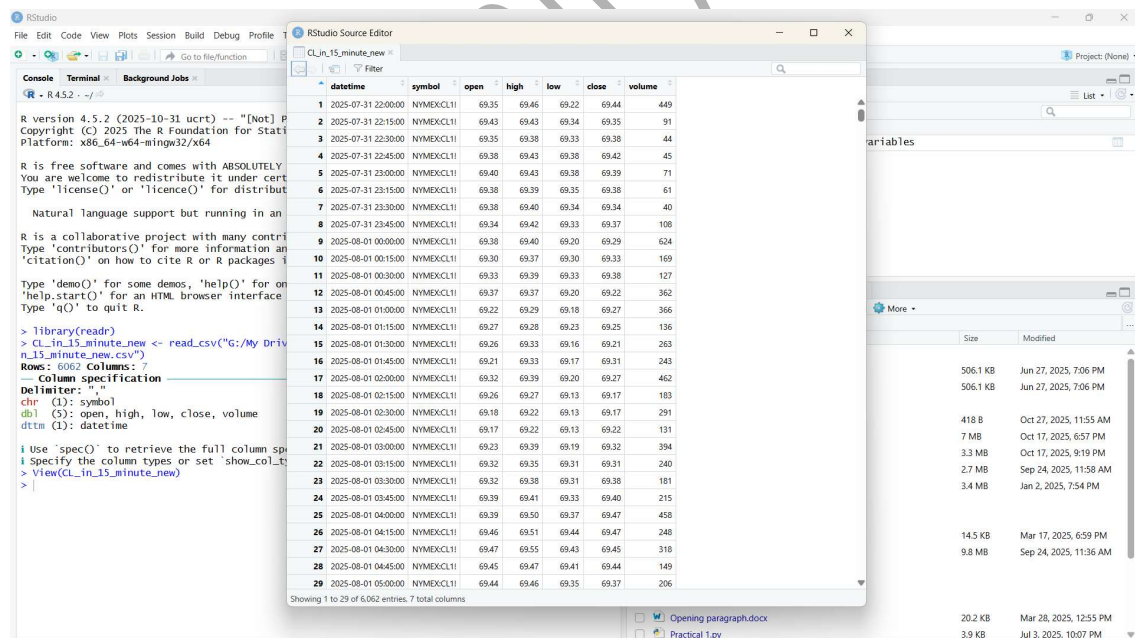
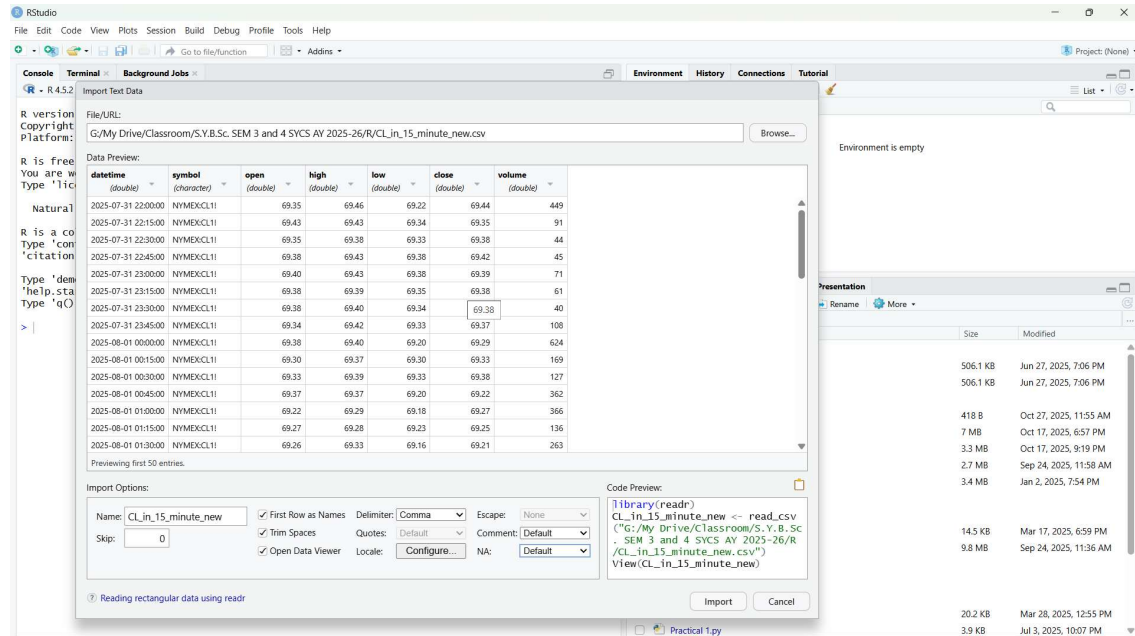


SHETH L.U.J AND SIR M.V. COLLEGE
SUBJECT NAME: **Data Analysis with SAS / SPSS / R**
Practical No. 2

Aim: Creating datasets from raw data (text files, CSV files, Excel sheets) and importing data into SAS/SPSS/R.



SHETH L.U.J AND SIR M.V. COLLEGE

SUBJECT NAME: Data Analysis with SAS / SPSS / R

Practical No. 2

R version 4.5.2 (2025-10-31 ucrt) -- "[Not] P
Copyright (C) 2025 The R Foundation for Stati
Platform: x86_64-w64-mingw32/x64

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Type 'contributors()' for more information an
'citation()' on how to cite R or R packages i
Type 'q()' to quit R.

```
> library(readr)
> CL_in_15_minute_new <- read_csv("G:/My Drive/CL_in_15_minute_new.csv")
Rows: 6062 Columns: 7
Column specification:
  Delimiter: ","
  chr (1): symbol
  dbl (5): open, high, low, close, volume
  dtm (1): datetime
i Use 'spec()' to retrieve the full column sp
i Specify the column types or set 'show_col_t
> View(CL_in_15_minute_new)
>
```

datetime	symbol	open	high	low	close	volume
2025-08-04 12:45:00	NYMEXCL11	65.74	65.74	65.50	65.53	3871
2025-08-04 13:00:00	NYMEXCL11	65.54	65.80	65.46	65.54	7300
2025-08-04 13:15:00	NYMEXCL11	65.55	65.82	65.53	65.68	3933
2025-08-04 13:30:00	NYMEXCL11	65.69	65.76	65.53	65.65	4294
2025-08-04 13:45:00	NYMEXCL11	65.64	65.74	65.53	65.66	3622
2025-08-04 14:00:00	NYMEXCL11	65.65	66.07	65.57	66.04	6436
2025-08-04 14:15:00	NYMEXCL11	66.05	66.20	65.80	66.09	4917
2025-08-04 14:30:00	NYMEXCL11	66.08	66.29	66.07	66.24	3160
2025-08-04 14:45:00	NYMEXCL11	66.23	66.95	66.22	66.87	13285
2025-08-04 15:00:00	NYMEXCL11	66.87	66.89	66.58	66.82	4708
2025-08-04 15:15:00	NYMEXCL11	66.82	66.86	66.60	66.82	3613
2025-08-04 15:30:00	NYMEXCL11	66.83	67.03	66.74	66.87	4115
2025-08-04 15:45:00	NYMEXCL11	66.87	66.94	67.03	66.80	2625
2025-08-04 16:00:00	NYMEXCL11	66.80	66.86	66.44	66.54	3449
2025-08-04 16:15:00	NYMEXCL11	66.54	66.64	66.46	66.49	2777
2025-08-04 16:30:00	NYMEXCL11	66.50	66.50	66.32	66.33	2005
2025-08-04 16:45:00	NYMEXCL11	66.33	66.37	66.22	66.28	2334
2025-08-04 17:00:00	NYMEXCL11	66.28	66.41	66.23	66.31	1791
2025-08-04 17:15:00	NYMEXCL11	66.30	66.36	66.25	66.31	1847
2025-08-04 17:30:00	NYMEXCL11	66.31	66.42	66.23	66.39	1945
2025-08-04 17:45:00	NYMEXCL11	66.40	66.40	66.18	66.26	2077
2025-08-04 18:00:00	NYMEXCL11	66.25	66.29	66.20	66.24	1826
2025-08-04 18:15:00	NYMEXCL11	66.24	66.44	66.19	66.28	5830
2025-08-04 18:30:00	NYMEXCL11	66.27	66.32	66.06	66.09	2395
2025-08-04 18:45:00	NYMEXCL11	66.09	66.16	66.05	66.16	913
2025-08-04 19:00:00	NYMEXCL11	66.15	66.24	66.13	66.13	710
2025-08-04 19:15:00	NYMEXCL11	66.13	66.22	66.12	66.20	553
2025-08-04 19:30:00	NYMEXCL11	66.21	66.21	66.10	66.14	688
2025-08-04 19:45:00	NYMEXCL11	66.13	66.13	65.94	66.09	1746

Showing 152 to 180 of 6,062 entries, 7 total columns

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☐ Practical 1.py

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Type 'q()' to quit R.

```
> library(readr)
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Rows: 6062 Columns: 7
Column specification:
  Delimiter: ","
  chr (1): symbol
  dbl (5): open, high, low, close, volume
  dtm (1): datetime
i Use 'spec()' to retrieve the full column sp
i Specify the column types or set 'show_col_t
> View(CL_in_15_minute_new)
>
```

datetime	symbol	open	high	low	close	volume
2025-08-06 12:30:00	NYMEXCL11	60.81	60.91	60.74	60.89	3414
2025-08-06 12:45:00	NYMEXCL11	60.89	60.89	60.81	60.87	13763
2025-08-06 13:00:00	NYMEXCL11	60.86	60.98	60.63	60.71	9698
2025-08-06 13:15:00	NYMEXCL11	60.72	60.86	60.70	60.76	4726
2025-08-06 13:30:00	NYMEXCL11	60.76	60.83	60.74	60.80	11403
2025-08-06 13:45:00	NYMEXCL11	60.31	60.64	60.07	60.30	11848
2025-08-06 14:00:00	NYMEXCL11	60.31	60.35	60.34	60.10	7664
2025-08-06 14:15:00	NYMEXCL11	60.10	60.18	60.03	60.09	1402
2025-08-06 14:30:00	NYMEXCL11	60.09	60.13	60.03	60.05	2079
2025-08-06 14:45:00	NYMEXCL11	60.06	60.11	60.08	60.08	2950
2025-08-06 15:00:00	NYMEXCL11	60.80	60.92	60.22	60.39	12147
2025-08-06 15:15:00	NYMEXCL11	60.40	60.48	60.21	60.34	10094
2025-08-06 15:30:00	NYMEXCL11	60.33	60.37	60.11	60.19	3802
2025-08-06 15:45:00	NYMEXCL11	60.19	60.35	60.08	60.12	3760
2025-08-06 16:00:00	NYMEXCL11	60.11	60.15	60.04	60.10	6512
2025-08-06 16:15:00	NYMEXCL11	60.11	60.19	60.07	60.01	1446
2025-08-06 16:30:00	NYMEXCL11	60.01	60.07	60.01	60.06	1510
2025-08-06 16:45:00	NYMEXCL11	60.05	60.13	60.03	60.08	1080
2025-08-06 17:00:00	NYMEXCL11	60.07	60.12	60.02	60.10	707
2025-08-06 17:15:00	NYMEXCL11	60.09	60.20	60.09	60.14	682
2025-08-06 17:30:00	NYMEXCL11	60.15	60.27	60.13	60.24	1091
2025-08-06 17:45:00	NYMEXCL11	60.24	60.33	60.20	60.27	1055
2025-08-06 18:00:00	NYMEXCL11	60.36	60.45	60.32	60.34	559
2025-08-06 18:15:00	NYMEXCL11	60.34	60.37	60.33	60.33	107
2025-08-06 18:30:00	NYMEXCL11	60.33	60.35	60.26	60.28	311
2025-08-06 18:45:00	NYMEXCL11	60.28	60.32	60.28	60.32	110
2025-08-06 19:00:00	NYMEXCL11	60.32	60.41	60.30	60.39	120
2025-08-06 19:15:00	NYMEXCL11	60.40	60.43	60.35	60.41	268
2025-08-06 19:30:00	NYMEXCL11	60.40	60.41	60.31	60.32	236

Showing 347 to 376 of 6,062 entries, 7 total columns

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