

# Econometrics Lab 7

```
install.packages("kableExtra")
```

The following package(s) will be installed:

- kableExtra [1.4.0]

These packages will be installed into "~/university\_of\_winnipeg/gecon\_7201/Labs/Econometrics Lab 7/renv/library/windows/R-4.4/x86\_64-mingw32".

```
# Installing packages -----  
- Installing kableExtra ... OK [linked from cache]  
Successfully installed 1 package in 24 milliseconds.
```

```
install.packages("viridis")
```

The following package(s) will be installed:

- viridis [0.6.5]

These packages will be installed into "~/university\_of\_winnipeg/gecon\_7201/Labs/Econometrics Lab 7/renv/library/windows/R-4.4/x86\_64-mingw32".

```
# Installing packages -----  
- Installing viridis ... OK [linked from cache]  
Successfully installed 1 package in 20 milliseconds.
```

```
library(knitr)
```

Warning: package 'knitr' was built under R version 4.4.2

```
library(kableExtra)
```

```
mtcars[1:5, 1:5] |>  
  kable()
```

	mpg	cyl	disp	hp	drat
Mazda RX4	21.0	6	160	110	3.90
Mazda RX4 Wag	21.0	6	160	110	3.90
Datsun 710	22.8	4	108	93	3.85
Hornet 4 Drive	21.4	6	258	110	3.08
Hornet Sportabout	18.7	8	360	175	3.15

```
mtcars[1:5, 1:5] |>
  kable(caption = "Table 1: Sample of MT Cars Data") |>
  kable_styling(full_width = FALSE) |>
  footnote(general = "Data from Motor Trend car road tests (1974).",
           general_title = "Note:")
```

Table 1: Sample of MT Cars Data

	mpg	cyl	disp	hp	drat
Mazda RX4	21.0	6	160	110	3.90
Mazda RX4 Wag	21.0	6	160	110	3.90
Datsun 710	22.8	4	108	93	3.85
Hornet 4 Drive	21.4	6	258	110	3.08
Hornet Sportabout	18.7	8	360	175	3.15

*Note:*

Data from Motor Trend car road tests (1974).

```
mtcars[1:5, 1:5] |>
  kable() |>
  kable_styling(full_width = TRUE) |>
  add_header_above(c(" " = 1, "Performance" = 2, "Efficiency" = 3))
```

	Performance		Efficiency		
	mpg	cyl	disp	hp	drat
Mazda RX4	21.0	6	160	110	3.90
Mazda RX4 Wag	21.0	6	160	110	3.90
Datsun 710	22.8	4	108	93	3.85
Hornet 4 Drive	21.4	6	258	110	3.08
Hornet Sportabout	18.7	8	360	175	3.15

```
library(dplyr)
```

Attaching package: 'dplyr'

The following object is masked from 'package:kableExtra':

group\_rows

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

filter, lag

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

intersect, setdiff, setequal, union

```
library(tibble)
mtcars[1:10, 1:5] |>
  rownames_to_column(var = "car") |>
  mutate(cyl = as.factor(cyl)) |>
  relocate(cyl, .before = car) |>
  arrange(cyl) |>
  kable(caption = "Grouped Rows Example") |>
```

```
kable_styling(full_width = FALSE) |>
collapse_rows(columns = 1, valign = "top")
```

Grouped Rows Example

cyl	car	mpg	disp	hp	drat
4	Datsun 710	22.8	108.0	93	3.85
	Merc 240D	24.4	146.7	62	3.69
	Merc 230	22.8	140.8	95	3.92
6	Mazda RX4	21.0	160.0	110	3.90
	Mazda RX4 Wag	21.0	160.0	110	3.90
	Hornet 4 Drive	21.4	258.0	110	3.08
	Valiant	18.1	225.0	105	2.76
	Merc 280	19.2	167.6	123	3.92
8	Hornet Sportabout	18.7	360.0	175	3.15
	Duster 360	14.3	360.0	245	3.21





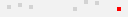
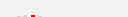

```
mtcars_subset <- mtcars[1:10, 1:5]
mtcars_sorted <- sort_by(mtcars_subset, mtcars_subset$cyl)
mtcars_sorted |>
  kable() |>
  kable_styling(full_width = TRUE) |>
  pack_rows("Cylinder: 4", 1, 3) |>
  pack_rows("Cylinder: 6", 4, 8) |>
  pack_rows("Cylinder: 8", 9, 10)
```








	mpg	cyl	disp	hp	drat
<b>Cylinder: 4</b>					
Datsun 710	22.8	4	108.0	93	3.85
Merc 240D	24.4	4	146.7	62	3.69

	mpg	cyl	disp	hp	drat
Merc 230	22.8	4	140.8	95	3.92
<b>Cylinder: 6</b>					
Mazda RX4	21.0	6	160.0	110	3.90
Mazda RX4 Wag	21.0	6	160.0	110	3.90
Hornet 4 Drive	21.4	6	258.0	110	3.08
Valiant	18.1	6	225.0	105	2.76
Merc 280	19.2	6	167.6	123	3.92
<b>Cylinder: 8</b>					
Hornet Sportabout	18.7	8	360.0	175	3.15
Duster 360	14.3	8	360.0	245	3.21

```
mpg_list <- split(mtcars$mpg, mtcars$cyl)
disp_list <- split(mtcars$disp, mtcars$cyl)
inline_plot <- data.frame(cyl = c(4,6,8), mpg_box = " ", mpg_hist = " ", mpg_line1 = " ", mpg_line2 = " ")

inline_plot |>
  kbl(booktabs = TRUE) |>
  kable_paper(full_width = FALSE) |>
  column_spec(2, image = spec_boxplot(mpg_list)) |>
  column_spec(3, image = spec_hist(mpg_list)) |>
  column_spec(4, image = spec_plot(mpg_list, same_lim = TRUE)) |>
  column_spec(5, image = spec_plot(mpg_list, same_lim = FALSE)) |>
  column_spec(6, image = spec_plot(mpg_list, type = "p")) |>
  column_spec(7, image = spec_plot(mpg_list, disp_list, type = "p")) |>
  column_spec(8, image = spec_plot(mpg_list, polymin = 5)) |>
  kable_styling(position = "center")
```

cyl	mpg_box	mpg_hist	mpg_line1	mpg_line2	mpg_points1	mpg_points2	mpg_poly
4							

	cyl	mpg_box	mpg_hist	mpg_line1	mpg_line2	mpg_points1	mpg_points2	mpg_poly
	6							
	8	