

20250514_01

May 14, 2025

```
[1]: library(tidyverse)
```

```
Attaching core tidyverse packages          tidyverse
2.0.0
dplyr      1.1.4      readr      2.1.5
forcats    1.0.0      stringr    1.5.1
ggplot2    3.5.2      tibble     3.2.1
lubridate  1.9.4      tidyr      1.3.1
purrr      1.0.4

Conflicts
tidyverse_conflicts()
dplyr::filter() masks stats::filter()
dplyr::lag()     masks stats::lag()
Use the conflicted package
(<http://conflicted.r-lib.org/>) to force all conflicts to
become errors
```

```
[3]: students = tibble(id = 1:5,
                        name = c("Ann", "Ben", "Cathy", "Dan", "Eva"),
                        math = c(78, 92, 85, 66, 88),
                        english = c(70, 85, 90, 75, 80),
                        passed = c(TRUE, TRUE, TRUE, FALSE, TRUE))
```

```
[7]: students %>% group_by(passed) %>% summarise(avg_math = mean(math),
                                                avg_eng = mean(english),
                                                count = n())
```

	passed	avg_math	avg_eng	count
	<lgl>	<dbl>	<dbl>	<int>
A tibble: 2 × 4	FALSE	66.00	75.00	1
	TRUE	85.75	81.25	4

```
[31]: students %>%
mutate(level = ifelse(math > 85, 'high', 'low')) %>%
group_by(passed, level) %>%
summarise(count = n(), .groups = 'drop')
```

	passed	level	count
	<lgl>	<chr>	<int>
A tibble: 3 × 3	FALSE	low	1
	TRUE	high	2
	TRUE	low	2

```
[37]: students %>%
  mutate(avg_score = (math + english)/2,
         grade = ifelse(avg_score > 85, 'A', ifelse(avg_score > 80, 'B', 'C')))%>%
  group_by(grade) %>%
  summarise(avg_math = mean(math),
            avg_english = mean(english),
            count = n()) %>%
  arrange(desc(grade))
```

	grade	avg_math	avg_english	count
	<chr>	<dbl>	<dbl>	<int>
A tibble: 3 × 4	C	72.0	72.5	2
	B	88.0	80.0	1
	A	88.5	87.5	2