

# TIDYVERSE Generate Panel Data Structures

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2020-04-01

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## Generate Panel Structure

Go back to [fan's REconTools](#) Package, [R4Econ](#) Repository, or [Intro Stats with R](#) Repository.

**Balanced Panel Skeleton** There are  $N$  individuals, each could be observed  $M$  times. In the example below, there are 3 students, each observed over 4 dates. This just uses the [uncount](#) function from *tidyr*.

```
# Define
it_N <- 3
it_M <- 5
svr_id <- 'student_id'
svr_date <- 'class_day'

# dataframe
df_panel_skeleton <- as_tibble(matrix(it_M, nrow=it_N, ncol=1)) %>%
  rowid_to_column(var = svr_id) %>%
  uncount(V1) %>%
  group_by(!!sym(svr_id)) %>% mutate(!!sym(svr_date) := row_number()) %>%
  ungroup()

# Print
kable(df_panel_skeleton) %>%
  kable_styling_fc_wide()
```

student_id	class_day
1	1
1	2
1	3
1	4
1	5
2	1
2	2
2	3
2	4
2	5
3	1
3	2
3	3
3	4