

# table

```
library(tidyverse)

## -- Attaching packages -----
## v ggplot2 3.0.0    v purrr  0.2.5
## v tibble  1.4.2    v dplyr  0.7.6
## v tidyr   0.8.1    v stringr 1.3.1
## v readr   1.1.1    v forcats 0.3.0

## -- Conflicts -----
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()

library(knitr)
library(kableExtra)
library(tibble)

num_folds = 10
wae <- tibble(
  model_one = rep(0, num_folds),
  model_two = rep(0, num_folds),
  model_three = rep(0, num_folds)
)

test.results = cbind(Fold=rep(1:num_folds), wae)
kable(test.results, col.names = c('Fold', 'Naive', 'SNaive', 'Dynamic')) %>%
  kable_styling(bootstrap_options = c("striped"), full_width = F)
```

Fold	Naive	SNaive	Dynamic
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0

- Run SVD (first 12 components) on each by-department sales data and then transform it back to the original matrix size.
- Missing value handling
  - Weekly\_Sales: replace missing value with 0.
  - IsHoliday: search through the training data to find the IsHoliday of same date. See function: `fill_missing_holiday`

*Note:* my testing show more sophisticated imputation approach won't improve the performance.