# tabularray로 표 그리기

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## 도입

## 혜성처럼 등장한...

- Overleaf users must download from https://ctan.org/tex-archive/macros/latex/ contrib/tabularray and put it in the project directory.
- sudo tlmgr update tabularray
- 2022A 기준

## 표를 그리자

입력	출력
1	5
2	7
3	9

# 기본

### 열 타입 i

#### colspec

참고: Tabularray<sup>†</sup> 매뉴얼 ???

$a_i$	b
	text
$x_i$	text

```
\begin{tblr}{%
  vlines, hlines,
  colspec = {Q[$]1},
}
  a_i & b \\
    & text \\
  x_i & text \\
\end{tblr}
```

<sup>&</sup>lt;sup>†</sup>버전 2022A (2022-03-01)

## 칸 정렬 i

tbhf h: text in the head of the cell

f: foot of the cell

b: bottom line in the middle

t: top line in the middle

참고: Tabularray<sup>†</sup> 매뉴얼 ???

row head	•	middle	line bottom	row foot
	top line		line bottom	row foot

```
\begin{tblr}[t]{hlines, colspec={c}, baseline=T}
  \hline
  {row\\head} & {top\\line} & {middle} & {line\\bottom}
      & {row\\foot} \\
  \hline
  {row\\head} & {top\\line} & {11\\22\\mid\\44\\55} & {
            line\\bottom} & {row\\foot} \\
            hline
  end{tblr}
```

<sup>&</sup>lt;sup>†</sup>버전 2022A (2022-03-01)

#### 문장과 정렬 i

baseline

참고: Tabularray<sup>†</sup> 매뉴얼 ???

#### 문장과 정렬 ii

```
Lorem ipsum
\begin{tblr}[t]{hlines, colspec={c}, baseline=T}
dolor \\ sit \\ amet,
\end{tblr}
consectetur
\begin{tblr}[b]{hlines, colspec={c}, baseline=B}
adipiscing \\ elit. \\
\end{tblr}
```

<sup>&</sup>lt;sup>†</sup>버전 2022A (2022-03-01)

심화

## 특별한 구분자 i

vline & hline

참고: Tabularray<sup>†</sup> 매뉴얼 **2.2 Hlines and Vlines** 

Equation	CH <sub>4</sub>	+ 2O <sub>2</sub> -	→ CO <sub>2</sub>	+ 2 H <sub>2</sub> O
Initial	$n_1$	$n_2$	0	0
Final	$n_1 - x$	$n_2 - 2x$	x	2x

#### 특별한 구분자 ii

```
% \usepackage{chemmacros} in the preamble
\begin{tblr}{%
  vlines, hlines,
  colspec = \{1X[c]X[c]X[c]X[c]\},
  vline{2} = {1}{ text = \clap{:}},
  vline{3} = {1}{ text = \clap{\ch{+}}} },
  vline{4} = {1}{ text = \clap{\ch{->}}} },
  vline{5} = {1}{ text = \clap{\ch{+}}} },
  Equation & \ch{CH4} & \ch{2 02} & \ch{CO2} & \ch{2 H20}
     } \\
  Initial & $n_1$ & $n_2$ & 0
                                            8 0 \\
                                         & $2x$ \\
  Final & $n_1-x$ & $n_2-2x$ & $x$
\end{tblr}
```

<sup>&</sup>lt;sup>†</sup>버전 2022A (2022-03-01)

#### 표 명령어 i

- \NewTableCommand를 사용하여 표 안에서 명령 사용 가능
- \NewTableCommand 안에는 텍스트 입력 불가
- expand 옵션으로 타협

참고: Tabularray<sup>†</sup> 매뉴얼 **3.2.3 Expand Macros First**, **3.6 New Table Commands** 

1	Beta	Gamma	Delta
2	Beta	Gamma	Delta
3	Beta	Gamma	Delta

#### 표 명령어 ii

```
% \NewTableCommand\SC{\SetCell{bg=red8}} in the preamble
\begin{tblr}{%
    hlines, vlines,
    cell{1}{2-4} = {bg=gray9},
}

1 & Beta & Gamma & Delta \\
2 & Beta & Gamma & Delta \\
3 & \SC Beta & \SC Gamma & Delta \\
end{tblr}
```

<sup>&</sup>lt;sup>†</sup>버전 2022A (2022-03-01)

#### 표 환경 i

- \NewTblrEnviron를 사용하여 새로운 표 환경 정의 가능
- 내부 설정 (inner specifications)
- 외부 설정 (outer specifications)

참고: Tabularray<sup>†</sup> 매뉴얼 **3.1 Inner Specifications**, **3.2 Outer Specifications**, **3.4 New Tabularray** Environments, **3.5 New General Environments** 

1	Beta	Gamma	Delta
2	Beta	Gamma	Delta
3	Beta	Gamma	Delta

#### 표 환경 ii

```
% \NewTableCommand\SC{\SetCell{bg=red8}} in the preamble
\begin{tblr}{%
    hlines, vlines,
    cell{1}{2-4} = {bg=gray9},
}

1 & Beta & Gamma & Delta \\
2 & Beta & Gamma & Delta \\
3 & \SC Beta & \SC Gamma & Delta \\
end{tblr}
```

<sup>&</sup>lt;sup>†</sup>버전 2022A (2022-03-01)

#### siunitx i

참고: Tabularray<sup>†</sup> 매뉴얼 **???** 

$V_s$ [mV]	$V_R$ [mV]	$V_D \ [\mathrm{mV}]$	$I_D$ [ $\mu$ A]
100.47	0.035	100.002	0.035
199.67	0.144	199.46	0.145
296.41	0.974	295.17	0.983
400.26	7.470	392.57	7.539
500.13	36.904	463.48	37.247
602.24	94.535	507.65	95.413
703.92	168.73	535.10	170.30
801.07	248.07	552.89	250.37
899.73	332.25	567.62	335.34
1008.14	428.76	579.35	432.74
1104.33	514.13	589.49	518.90
1200.23	602.45	597.38	608.04

#### siunitx ii

```
% \UseTblrLibrary{booktabs}
% \UseTblrLibrary{siunitx} in the preamble
\begin{tblr}{S[table-format=4.2]S[table-format=3.3]S[
   table-format=3.37S[table-format=3.37}
 \toprule
  {{{$V s$ [mV]}}} & {{{$V R$ [mV]}}} & {{{{$V D$ [mV]}}}}
      & {{{$I_D$ [μΑ]}}} \\
 \midrule
 100.47 & 0.035
                       & 100.002
                                  & 0.035\\
 199.67 & 0.144
                       & 199.46
                                  & 0.145\\
  296.41 & 0.974
                      & 295.17 & 0.983\\
 400.26
           & 7.470
                      & 392.57
                                    & 7.539\\
  500.13
           & 36.904 & 463.48
                                    & 37.247\\
           & 94.535
                   & 507.65
  602.24
                                    & 95.413\\
  703.92
           & 168.73 & 535.10
                                    & 170.30\\
  801.07
           & 248.07
                       & 552.89
                                    & 250.37\\
```

```
899.73
             & 332.25
                            & 567.62
                                          & 335.34\\
  1008.14
             & 428.76
                            & 579.35
                                          & 432.74\\
  1104.33
             & 514.13
                            & 589.49
                                          & 518.90\\
  1200.23
             & 602.45
                            & 597.38
                                          & 608.04\\
  \bottomrule
\end{tblr}
```

<sup>&</sup>lt;sup>†</sup>버전 2022A (2022-03-01)