# **Zebraw**

Zebraw is a lightweight and fast package for displaying code blocks with line numbers in typst, supporting code line highlighting. The term *Zebraw* is a combination of *zebra* and *raw*, for the highlighted lines will be displayed in the code block like a zebra lines.

# **Starting**

Import zebraw package by #import "@preview/zebraw:0.4.1": \* then follow with #show: zebraw to start using zebraw in the simplest way. To manually display some specific code blocks in zebraw, you can use #zebraw() function:

```
```typ
#grid(
 columns: (1fr, 1fr),
 [Hello], [world!],
#zebraw(
   ``typ
 #grid(
   columns: (1fr, 1fr),
   [Hello], [world!],
  )
)
#show: zebraw
```typ
#grid(
 columns: (1fr, 1fr),
 [Hello], [world!],
```

```
#grid(
  columns: (1fr, 1fr),
  [Hello], [world!],
)

1 #grid(
2  columns: (1fr, 1fr),
3  [Hello], [world!],
4 )

1 #grid(
2  columns: (1fr, 1fr),
3  [Hello], [world!],
4 )
```

#### **Features**

### Line Highlighting

You can highlight specific lines in the code block by passing the highlight-lines parameter to the zebraw function. The highlight-lines parameter can be a single line number or an array of line numbers.

```
1 #grid(
2 columns: (1fr, 1fr),
3 [Hello], [world!],
4 )

1 = Fibonacci sequence
2 The Fibonacci sequence is defined through the
3 recurrence relation $F_n = F_(n-1) + F_(n-2)$.
4 It can also be expressed in _closed form:_
```

```
= Fibonacci sequence
  The Fibonacci sequence is defined
through the
 recurrence relation F_n = F_{n-1} +
F_{(n-2)}.
 It can also be expressed in _closed
  F_n = round(1 / sqrt(5) phi.alt^n),
auad
    phi.alt = (1 + sqrt(5)) / 2 $
  #let count = 8
  #let nums = range(1, count + 1)
  \#let fib(n) = (
   if n \le 2 \{ 1 \}
    else { fib(n-1) + fib(n-2) }
  The first #count numbers of the
sequence are:
  #align(center, table(
    columns: count,
    .. nums.map(n \Rightarrow $F_#n$),
    ..nums.map(n \Rightarrow str(fib(n))),
  ))
)
```

```
6 \ F_n = round(1 / sqrt(5))
 phi.alt^n), quad
 7 phi.alt = (1 + sqrt(5)) / 2 $
10 #let nums = range(1, count + 1)
11 #let fib(n) = (
     if n \le 2 \{ 1 \}
12
     else { fib(n-1) + fib(n-2) }
13
14 )
15
16 The first #count numbers of the
   sequence are:
17
18 #align(center, table(
19
     columns: count,
     .. nums.map(n \Rightarrow $F_#n$),
20
     .. nums.map(n \Rightarrow str(fib(n))),
21
22 ))
```

#### Comment

You can add comments to the highlighted lines by passing an array of line numbers and comments to the highlight-lines parameter.

```
#zebraw(
  highlight-lines: (
    (1, [The Fibonacci sequence is
defined through the recurrence relation
F_n = F_{n-1} + F_{n-2}
    It can also be expressed in _closed
form: F_n = round(1 / sqrt(5))
phi.alt^n), quad
    phi.alt = (1 + sqrt(5)) / 2 $]),
    // Passing a range of line numbers in
the array should begin with `..`
    .. range(9, 14),
    (13, [The first \#count numbers of
the sequence.]),
 ), typ
  = Fibonacci sequence
  #let count = 8
  #let nums = range(1, count + 1)
  \#let fib(n) = (
   if n \le 2 \{ 1 \}
    else { fib(n-1) + fib(n-2) }
  #align(center, table(
```

```
1 = Fibonacci sequence
    > The Fibonacci sequence is defined
    through the recurrence relation
    F_n = F_{n-1} + F_{n-2}
    It can also be expressed in closed
    form:
            F_n = \left\lfloor \frac{1}{\sqrt{5}} \phi^n \right\rfloor, \quad \phi = \frac{1 + \sqrt{5}}{2}
 2 \#let count = 8
 3 \#let nums = range(1, count + 1)
 4 \#let fib(n) = (
      if n \le 2 \{ 1 \}
      else { fib(n-1) + fib(n-2) }
 6
 7)
 8
 9 #align(center, table(
10
      columns: count,
      .. nums.map(n \Rightarrow $F_#n$),
11
12
      .. nums.map(n \Rightarrow str(fib(n))),
13 ))
    > The first #count numbers of the
    sequence.
```

```
columns: count,
   ..nums.map(n ⇒ $F_#n$),
   ..nums.map(n ⇒ str(fib(n))),
   ))
)
```

Comments can begin with a flag, which is ">" by default. You can change the flag by passing the comment-flag parameter to the zebraw function:

```
#zebraw(
 highlight-lines: (
    // Comments can only be passed when
highlight-lines is an array, so at the
end of the single element array, a comma
is needed.
    (6, [The Fibonacci sequence is
defined through the recurrence relation
F_n = F_{n-1} + F_{n-2},
 ),
  comment-flag: "→→",
    `typ
  = Fibonacci sequence
  #let count = 8
  #let nums = range(1, count + 1)
  \#let fib(n) = (
   if n ≤ 2 { 1 }
   else { fib(n - 1) + fib(n - 2) }
  #align(center, table(
   columns: count,
    .. nums.map(n \Rightarrow $F_#n$),
    ..nums.map(n \Rightarrow str(fib(n))),
  ))
)
```

```
1 = Fibonacci sequence
 3 \#let nums = range(1, count + 1)
 4 \#let fib(n) = (
     if n \le 2 \{ 1 \}
     else { fib(n-1) + fib(n-2) }
     The Fibonacci sequence is
   defined through the recurrence
   \text{relation } F_n = F_{n-1} + F_{n-2}
 7 )
 9 #align(center, table(
10
     columns: count,
11
      .. nums.map(n \Rightarrow $F_#n$),
     .. nums.map(n \Rightarrow str(fib(n))),
12
13 ))
```

To disable the flag feature, pass "" to the comment-flag parameter (the indentation of the comment will be disabled as well):

```
#zebraw(
 highlight-lines: (
   (6, [The Fibonacci sequence is
defined through the recurrence relation
F_n = F_{n-1} + F_{n-2},
 ),
 comment-flag: "",
    typ
 = Fibonacci sequence
 #let count = 8
 #let nums = range(1, count + 1)
 \#let fib(n) = (
  if n ≤ 2 { 1 }
   else { fib(n-1) + fib(n-2) }
 #align(center, table(
   columns: count,
```

```
1 = Fibonacci sequence
 3 \#let nums = range(1, count + 1)
 4 \#let fib(n) = (
     if n \le 2 \{ 1 \}
     else \{ fib(n-1) + fib(n-2) \}
   The Fibonacci sequence is defined
   through the recurrence relation
   F_n = F_{n-1} + F_{n-2}
 7)
 9 #align(center, table(
10
     columns: count,
11
     .. nums.map(n \Rightarrow $F_#n$),
12
     .. nums.map(n \Rightarrow str(fib(n))),
13 ))
```

```
.. nums.map(n ⇒ $F_#n$),
.. nums.map(n ⇒ str(fib(n))),
))
)
```

#### **Header and Footer**

Usually, the comments passing by a dictionary of line numbers and comments are used to add a header or footer to the code block:

```
#zebraw(
  highlight-lines: (
    (header: [*Fibonacci sequence*]),
    .. range(8, 13),
    // Numbers can be passed as a string
in the dictionary, but it's too ugly.
    ("12": [The first \#count numbers of
the sequence.]),
    (footer: [The fibonacci sequence is
defined through the recurrence relation
F_n = F_{(n-1)} + F_{(n-2)},
 ), typ
  #let count = 8
  #let nums = range(1, count + 1)
  \#let fib(n) = (
   if n \leq 2 \{ 1 \}
    else { fib(n-1) + fib(n-2) }
  #align(center, table(
    columns: count,
    .. nums.map(n \Rightarrow $F_#n$),
    ..nums.map(n \Rightarrow str(fib(n))),
  ))
)
```

```
Fibonacci sequence
 1 #let count = 8
 2 \#let nums = range(1, count + 1)
 3 \# let fib(n) = (
     if n \le 2 \{ 1 \}
     else { fib(n-1) + fib(n-2) }
 6)
 7
 8 #align(center, table(
     columns: count,
      .. nums.map(n \Rightarrow $F_#n$),
10
      .. nums.map(n \Rightarrow str(fib(n))),
11
12 ))
   > The first #count numbers of the
   sequence.
The fibonacci sequence is defined
through the recurrence relation F_n =
F_{n-1} + F_{n-2}
```

Or you can use header and footer parameters to add a header or footer to the code block:

```
#zebraw(
  highlight-lines: (
    .. range(8, 13).
    (12, [The first \#count numbers of
the sequence.]),
  ),
  header: [*Fibonacci sequence*],
   ``typ
  #let count = 8
  #let nums = range(1, count + 1)
  \#let fib(n) = (
    if n \le 2 \{ 1 \}
    else { fib(n - 1) + fib(n - 2) }
  #align(center, table(
    columns: count,
    ..nums.map(n \Rightarrow $F_#n$),
    .. nums.map(n \Rightarrow str(fib(n))),
```

```
Fibonacci sequence
 1 #let count = 8
 2 \#let nums = range(1, count + 1)
 3 \#let fib(n) = (
     if n \le 2 \{ 1 \}
 5
     else { fib(n-1) + fib(n-2) }
 6)
 7
 8 #align(center, table(
 9
     columns: count,
     .. nums.map(n \Rightarrow $F_#n$),
10
      .. nums.map(n \Rightarrow str(fib(n))),
11
12 ))
   > The first #count numbers of the
   sequence.
```

```
))
  footer: [The fibonacci sequence is
defined through the recurrence relation
F_n = F_{(n-1)} + F_{(n-2)},
```

```
The fibonacci sequence is defined
through the recurrence relation F_n =
F_{n-1} + F_{n-2}
```

### Language Tab

If lang is set to true, then there will be a language tab on the top right corner of the code block:

```
#zebraw(
  lang: true,
    typst
  #grid(
   columns: (1fr, 1fr),
    [Hello], [world!],
)
```

```
typst
1 #grid(
  columns: (1fr, 1fr),
    [Hello], [world!],
3
```

Customize the language to display by pass a string or content to the lang parameter.

```
#zebraw(
  lang: strong[Typst],
    typst
  #grid(
    columns: (1fr, 1fr),
    [Hello], [world!],
)
```

```
Typst
1 #grid(
    columns: (1fr, 1fr),
3
    [Hello], [world!],
4 )
```

### Copyable

Line numbers will not be selected when selecting exported code in one page.

```
1 #grid(
2 columns: (1fr, 1fr),
3 [Hello], [world!],
4 )
```

copyable: true

# 1 #grid( columns: (1fr, 1fr), [Hello], [world!], 4)

copyable: false

# Theme

PRs are welcome!

```
#show: zebraw-init.with(..zebraw-
themes.zebra, lang: false)
#show: zebraw
```rust
pub fn fibonacci_reccursive(n: i32) →
u64 {
    if n < 0 {
        panic!("{} is negative!", n);
    }
    match n {
        0 \Rightarrow panic!("zero is not a right)
```

```
1 pub fn fibonacci_reccursive(n:
  i32) → u64 {
2 if n < 0 {
          panic!("{} is negative!",
  n);
4
5
      match n {
          0 ⇒ panic!("zero is not a
  right argument to
  fibonacci_reccursive()!"),
```

```
argument to fibonacci_reccursive()!"),

1 \mid 2 \Rightarrow 1,

3 \Rightarrow 2,

_{-} \Rightarrow fibonacci_reccursive(n - 1)

+ fibonacci_reccursive(n - 2),

}
```

```
#show: zebraw-init.with(..zebraw-
themes.zebra-reverse, lang: false)
#show: zebraw
```rust
pub fn fibonacci_reccursive(n: i32) →
u64 {
    if n < 0 {
        panic!("{} is negative!", n);
    }
    match n {
        0 \Rightarrow panic!("zero is not a right)
argument to fibonacci_reccursive()!"),
        1 \mid 2 \Rightarrow 1
        3 \Rightarrow 2,
        _ ⇒ fibonacci_reccursive(n - 1)
+ fibonacci_reccursive(n - 2),
    }
```

```
1 pub fn fibonacci_reccursive(n:
   i32) → u64 {
       if n < 0 {
 3
           panic!("{} is negative!",
 n);
       }
 5
       match n {
            0 ⇒ panic!("zero is not a
   right argument to
   fibonacci_reccursive()!"),
7 	 1 | 2 \Rightarrow 1,
           3 \Rightarrow 2,
           _{-} \Rightarrow
   fibonacci_reccursive(n - 1) +
   fibonacci_reccursive(n - 2),
10
       }
11 }
```

### Customization

There are 3 ways to customize code blocks in your document:

- Manually render some specific blocks by #zebraw() function and passing parameters to it.
- By passing parameters to #show: zebraw.with() will affect every raw block after the #show rule, except blocks created manually by #zebraw() function.
- By passing parameters to <code>#show</code>: <code>zebraw-init.with()</code> will affect every raw block after the <code>#show</code> rule, <code>including</code> blocks created manually by <code>#zebraw()</code> function. By using <code>zebraw-init</code> without any parameters, the values will be reset to default.

#### Inset

Customize the inset of each line by passing a dictionary to the inset parameter:

```
#zebraw(
  inset: (top: 6pt, bottom: 6pt),
    typ
  #grid(
    columns: (1fr, 1fr),
    [Hello], [world!],
  )
)
```

```
1 #grid(
2 columns: (1fr, 1fr),
3 [Hello], [world!],
4 )
```

### Colors

Customize the background color by passing a color or an array of colors to the background-color parameter.

```
1 #grid(
2 columns: (1fr, 1fr),
3 [Hello], [world!],
4 )

1 #grid(
2 columns: (1fr, 1fr),
3 [Hello], [world!],
4 )
```

Customize the highlight color by passing a color to the highlight-color parameter:

```
1 I'm so blue!
2 -- George III
```

Customize the comments' background color by passing a color to the comment-color parameter:

```
1 I'm so blue!
2 -- George III
> auto indent!
3 I'm not.
4 -- Hamilton
```

Customize the language tab's background color by passing a color to the lang-color parameter.

```
1 #grid(
2 columns: (1fr, 1fr),
3 [Hello], [world!],
4 )
```

#### Font

To customize the arguments of comments' font and the language tab's font, pass a dictionary to comment-font-args parameter and lang-font-args parameter.

Language tab will be rendered as comments if nothing is passed.

```
#zebraw(
 highlight-lines: (
   (2, "columns ... "),
  lang: true,
  lang-color: eastern,
  lang-font-args: (
    font: "libertinus serif",
   weight: "bold",
    fill: white,
  ),
  comment-font-args: (
    font: "IBM Plex Sans",
    style: "italic"
 ),
typst
  #grid(
    columns: (1fr, 1fr),
    [Hello], [world!],
 )
)
```

### Extend

Extend at vertical is enabled at default. When there's header or footer it will be automatically disabled.

```
#zebraw(
  extend: false,
  ``typst
  #grid(
    columns: (1fr, 1fr),
    [Hello], [world!],
  )
```

```
1 #grid(
2 columns: (1fr, 1fr),
3 [Hello], [world!],
4 )
```

```
)
```

# **Documentation**

The default value of most parameters are none for it will use the default value in zebraw-init.

- zebraw-init()
- zebraw()

#### zebraw-init

Initialize the zebraw block in global.

#### **Parameters**

```
zebraw-init(
  inset: dictionary,
  background-color: color array,
  highlight-color: color,
  comment-color: color,
  lang-color: color,
  comment-flag: string content,
  lang: boolean string content,
  comment-font-args: dictionary,
  lang-font-args: dictionary,
  extend: boolean,
  body: content
) -> content
```

```
inset dictionary
The inset of each line.
Default: (top: 0.34em, right: 0.34em, bottom: 0.34em, left: 0.34em)
```

```
background-color color or array

The background color of the block and normal lines.

Default: luma(245)
```

```
highlight-color color

The background color of the highlighted lines.

Default: rgb("#94e2d5").lighten(70%)
```

```
comment-color color
```

The background color of the comments. When it's set to none, it will be rendered in a lightened highlight-color.

# lang-color color

The background color of the language tab. The color is set to none at default and it will be rendered in comments' color.

Default: none

```
comment-flag string or content
```

The flag at the beginning of comments.

Default: ">"

```
lang boolean or string or content
```

Whether to show the language tab, or a string or content of custom language name to display.

Default: true

# comment-font-args dictionary

The arguments passed to comments' font.

Default: (:)

# lang-font-args dictionary

The arguments passed to the language tab's font.

Default: (:)

# extend boolean

Whether to extend the vertical spacing.

Default: true

# **body** content

The body

# zebraw

Block of code with highlighted lines and comments.

#### **Parameters**

```
zebraw(
 highlight-lines: array int,
 header: string content,
 footer: string content,
 inset: dictionary,
 background-color: color array,
 highlight-color: color,
 comment-color: color,
 lang-color: color,
 comment-flag: string content,
 lang: boolean string,
 comment-font-args: dictionary,
 lang-font-args: dictionary,
 extend: boolean,
 body: content
) -> content
```

# highlight-lines array or int

Lines to highlight or comments to show.

```
#zebraw(
 highlight-lines: range(3, 7),
  header: [*Fibonacci sequence*],
 #let count = 8
 #let nums = range(1, count + 1)
  \#let fib(n) = (
   if n \le 2 \{ 1 \}
   else { fib(n-1) + fib(n-2) }
 #align(center, table(
   columns: count,
    ..nums.map(n \Rightarrow $F_#n$),
    ..nums.map(n \Rightarrow str(fib(n))),
  ))
 footer: [The fibonacci sequence is
defined through the recurrence relation
F_n = F_{n-1} + F_{n-2},
```

```
Fibonacci sequence
 1 #let count = 8
 2 #let nums = range(1, count + 1)
 3 \#let fib(n) = (
   if n ≤ 2 { 1 }
 5 else { fib(n - 1) + fib(n -
   2) }
 6)
 7
 8 #align(center, table(
 9 columns: count,
     .. nums.map(n \Rightarrow $F_#n$),
10
11
     ..nums.map(n \Rightarrow str(fib(n))),
12 ))
The fibonacci sequence is defined
through the recurrence relation
F_n = F_{n-1} + F_{n-2}
```

Default: ()

```
header string or content
```

The header of the code block.

```
footer string or content
```

The footer of the code block.

Default: none

# inset dictionary

The inset of each line.

```
#zebraw(
  inset: (top: 6pt, bottom: 6pt),
  ``typst
  #let count = 8
  #let nums = range(1, count + 1)
  #let fib(n) = (
    if n \le 2 \{ 1 \}
    else \{ fib(n - 1) + fib(n - 2) \}
)

#align(center, table(
    columns: count,
    ..nums.map(n \Rightarrow \$F_\#n\$),
    ..nums.map(n \Rightarrow \$tr(fib(n))),
))
    ,
))
    ,
)
```

```
1 #let count = 8
2 #let nums = range(1, count + 1)
3 #let fib(n) = (
4    if n \le 2 \{ 1 \}
5    else \{ fib(n - 1) + fib(n - 2) \}
6 )
7
8 #align(center, table(
9    columns: count,
10    ..nums.map(n \Rightarrow \forall F_#n\forall ),
11    ..nums.map(n \Rightarrow \forall str(fib(n))),
12 ))
```

# background-color color or array

The background color of the block and normal lines.

```
#zebraw(
  background-color: (luma(240),
luma(245), luma(250), luma(245)),
  ``typst
  #let count = 8
  #let nums = range(1, count + 1)
  #let fib(n) = (
    if n \le 2 \{ 1 \}
    else \{ fib(n - 1) + fib(n - 2) \}
)

#align(center, table(
    columns: count,
    ...nums.map(n \Rightarrow \F_\#n\$),
    ...nums.map(n \Rightarrow \Str(fib(n))),
))

,
))
,
))
,
)
```

```
1 #let count = 8
2 #let nums = range(1, count + 1)
3 #let fib(n) = (
4    if n \le 2 \{ 1 \}
5    else \{ fib(n - 1) + fib(n - 2) \}
6 )
7
8 #align(center, table(
9    columns: count,
10     ...nums.map(n \Rightarrow \F_\munus, \munus, \munus \munus, \munus \munu
```

Default: none

# highlight-color color

The background color of the highlighted lines.

### comment-color color

The background color of the comments. The color is set to none at default and it will be rendered in a lightened highlight-color.

```
#zebraw(
 highlight-color: yellow.lighten(80%),
  comment-color: yellow.lighten(90%),
  highlight-lines: (
    (1, [The Fibonacci sequence is
defined through the recurrence relation
F_n = F_{n-1} + F_{n-2},
    .. range(9, 14),
    (13, [The first \#count numbers of
the sequence.]),
 ),
typ
  = Fibonacci sequence
  #let count = 8
  #let nums = range(1, count + 1)
  \#let fib(n) = (
   if n \leq 2 \{ 1 \}
    else { fib(n - 1) + fib(n - 2) }
 #align(center, table(
   columns: count,
    ..nums.map(n \Rightarrow $F_#n$),
    .. nums.map(n \Rightarrow str(fib(n))),
 ))
)
```

```
1 = Fibonacci sequence
   > The Fibonacci sequence is
   defined through the recurrence
   \text{relation } F_n = F_{n-1} + F_{n-2}
 2 #let count = 8
 3 \#let nums = range(1, count + 1)
 4 \#let fib(n) = (
     if n ≤ 2 { 1 }
    else { fib(n - 1) + fib(n -
   2) }
 7 )
 8
9 #align(center, table(
10
   columns: count,
11
     .. nums.map(n \Rightarrow $F_#n$),
12
      .. nums.map(n \Rightarrow str(fib(n))),
13 ))
   > The first #count numbers of
   the sequence.
```

Default: none

### lang-color color

The background color of the language tab. The color is set to none at default and it will be rendered in comments' color.

```
#zebraw(
  lang: true,
  lang-color: eastern,
  lang-font-args: (
    font: "libertinus serif",
    weight: "bold",
    fill: white
),
    typst
#grid(
    columns: (1fr, 1fr),
    [Hello], [world!],
)
```

```
1 #grid(
2 columns: (1fr, 1fr),
3 [Hello], [world!],
4 )
```

### comment-flag string or content

The flag at the beginning of comments. The indentation of codes will be rendered before the flag. When the flag is set to "", the indentation before the flag will be disabled as well.

```
#zebraw(
 comment-flag: "",
  highlight-lines: (
    (1, [The Fibonacci sequence is
defined through the recurrence relation
F_n = F_{n-1} + F_{n-2},
    .. range(9, 14),
    (13, [The first \#count numbers of
the sequence.]),
 ),
typ
  = Fibonacci sequence
 #let count = 8
  #let nums = range(1, count + 1)
  \#let fib(n) = (
   if n ≤ 2 { 1 }
    else { fib(n - 1) + fib(n - 2) }
 #align(center, table(
   columns: count,
    .. nums.map(n \Rightarrow $F_#n$),
    ..nums.map(n \Rightarrow str(fib(n))),
  ))
)
```

```
1 <u>= Fibonacci sequence</u>
   The Fibonacci sequence is
   defined through the recurrence
   relation F_n = F_{n-1} + F_{n-2}
 2 #let count = 8
 3 \#let nums = range(1, count + 1)
 4 \#let fib(n) = (
    if n ≤ 2 { 1 }
    else { fib(n - 1) + fib(n -
   2) }
 7)
 8
9 #align(center, table(
   columns: count,
10
11
     .. nums.map(n \Rightarrow $F #n$),
12
      .. nums.map(n \Rightarrow str(fib(n))),
13 ))
   The first #count numbers of the
   sequence.
```

Default: none

### lang boolean or string

Whether to show the language tab, or a string or content of custom language name to display.

```
1 #grid(
2 columns: (1fr, 1fr),
3 [Hello,], [world!],
4 )
```

```
1 #grid(
2 columns: (1fr, 1fr),
3 [Hello,], [world!],
4 )
```

# comment-font-args dictionary

The arguments passed to comments' font.

Default: none

## lang-font-args dictionary

The arguments passed to the language tab's font.

```
#zebraw(
 lang: true,
 comment-font-args: (font: "IBM Plex
Serif", style: "italic"),
 lang-font-args: (font: "IBM Plex Sans",
weight: "bold"),
 highlight-lines: (
    (1, [The Fibonacci sequence is
defined through the recurrence relation
F_n = F_{n-1} + F_{n-2},
    .. range(9, 14),
    (13, [The first \mbox{\#count numbers of}
the sequence.]),
 ), typ
  = Fibonacci sequence
 #let count = 8
 #let nums = range(1, count + 1)
  \#let fib(n) = (
   if n \le 2 \{ 1 \}
    else { fib(n - 1) + fib(n - 2) }
 #align(center, table(
   columns: count,
    ..nums.map(n \Rightarrow $F_#n$),
    ..nums.map(n \Rightarrow str(fib(n))),
  ))
)
```

```
typ
 1 = Fibonacci sequence
   > The Fibonacci sequence is defined through
   the recurrence relation F_n = F_{n-1} + F_{n-2}
 3 \#let nums = range(1, count + 1)
 4 \#let fib(n) = (
    if n ≤ 2 { 1 }
 5
    else { fib(n - 1) + fib(n -
   2) }
 7 )
 8
 9 #align(center, table(
10
     columns: count,
      .. nums.map(n \Rightarrow $F_#n$),
11
12
      .. nums.map(n \Rightarrow str(fib(n))),
13 ))
   > The first #count numbers of the sequence.
```

Default: none

# extend boolean

Whether to extend the vertical spacing.

```
1 #grid(
2 columns: (1fr, 1fr),
3 [Hello,], [world!],
4 )
```

```
body content
The body.
```

# **Example**

```
rust
Calculate Fibonacci number using reccursive function
1 pub fn fibonacci_reccursive(n: i32) → u64 {
2
       if n < 0 {
           panic!("{} is negative!", n);
3
           > to avoid negative numbers
       }
4
5
       match n {
           0 \Rightarrow panic!("zero is not a right argument to fibonacci_reccursive()!"),
6
7
           1 \mid 2 \Rightarrow 1,
8
           3 \Rightarrow 2
           _ ⇒ fibonacci_reccursive(n - 1) + fibonacci_reccursive(n - 2),
           > 50 ⇒ 12586269025
       }
10
11 }
```