# fill-range [Donate](https://www.paypal.com/cgi-bin/webscr?cmd=_s-xclick&hosted_button_id=W8YFZ425KND68) [NPM version](https://www.npmjs.com/package/fill-range) [NPM monthly downloads](https://npmjs.org/package/fill-range) [NPM total downloads](https://npmjs.org/package/fill-range) [Linux Build Status](https://travis-ci.org/jonschlinkert/fill-range)

Fill in a range of numbers or letters, optionally passing an increment or step to use, or create a regex-compatible range with options.toRegex

Please consider following this project's author, [Jon Schlinkert](https://github.com/jonschlinkert), and consider starring the project to show your :heart: and support.

## Install

Install with [npm](https://www.npmjs.com/):

$ npm install --save fill-range

## Usage

Expands numbers and letters, optionally using a step as the last argument. *(Numbers may be defined as JavaScript numbers or strings)*.

const fill = require('fill-range');

// fill(from, to[, step, options]);

console.log(fill('1', '10')); //=> ['1', '2', '3', '4', '5', '6', '7', '8', '9', '10']

console.log(fill('1', '10', { toRegex: true })); //=> [1-9]|10

**Params**

* from: **{String|Number}** the number or letter to start with
* to: **{String|Number}** the number or letter to end with
* step: **{String|Number|Object|Function}** Optionally pass a [step](#optionsstep) to use.
* options: **{Object|Function}**: See all available [options](#options)

## Examples

By default, an array of values is returned.

**Alphabetical ranges**

console.log(fill('a', 'e')); //=> ['a', 'b', 'c', 'd', 'e']

console.log(fill('A', 'E')); //=> [ 'A', 'B', 'C', 'D', 'E' ]

**Numerical ranges**

Numbers can be defined as actual numbers or strings.

console.log(fill(1, 5)); //=> [ 1, 2, 3, 4, 5 ]

console.log(fill('1', '5')); //=> [ 1, 2, 3, 4, 5 ]

**Negative ranges**

Numbers can be defined as actual numbers or strings.

console.log(fill('-5', '-1')); //=> [ '-5', '-4', '-3', '-2', '-1' ]

console.log(fill('-5', '5')); //=> [ '-5', '-4', '-3', '-2', '-1', '0', '1', '2', '3', '4', '5' ]

**Steps (increments)**

// numerical ranges with increments

console.log(fill('0', '25', 4)); //=> [ '0', '4', '8', '12', '16', '20', '24' ]

console.log(fill('0', '25', 5)); //=> [ '0', '5', '10', '15', '20', '25' ]

console.log(fill('0', '25', 6)); //=> [ '0', '6', '12', '18', '24' ]

// alphabetical ranges with increments

console.log(fill('a', 'z', 4)); //=> [ 'a', 'e', 'i', 'm', 'q', 'u', 'y' ]

console.log(fill('a', 'z', 5)); //=> [ 'a', 'f', 'k', 'p', 'u', 'z' ]

console.log(fill('a', 'z', 6)); //=> [ 'a', 'g', 'm', 's', 'y' ]

## Options

### options.step

**Type**: number (formatted as a string or number)

**Default**: undefined

**Description**: The increment to use for the range. Can be used with letters or numbers.

**Example(s)**

// numbers

console.log(fill('1', '10', 2)); //=> [ '1', '3', '5', '7', '9' ]

console.log(fill('1', '10', 3)); //=> [ '1', '4', '7', '10' ]

console.log(fill('1', '10', 4)); //=> [ '1', '5', '9' ]

// letters

console.log(fill('a', 'z', 5)); //=> [ 'a', 'f', 'k', 'p', 'u', 'z' ]

console.log(fill('a', 'z', 7)); //=> [ 'a', 'h', 'o', 'v' ]

console.log(fill('a', 'z', 9)); //=> [ 'a', 'j', 's' ]

### options.strictRanges

**Type**: boolean

**Default**: false

**Description**: By default, null is returned when an invalid range is passed. Enable this option to throw a RangeError on invalid ranges.

**Example(s)**

The following are all invalid:

fill('1.1', '2'); // decimals not supported in ranges

fill('a', '2'); // incompatible range values

fill(1, 10, 'foo'); // invalid "step" argument

### options.stringify

**Type**: boolean

**Default**: undefined

**Description**: Cast all returned values to strings. By default, integers are returned as numbers.

**Example(s)**

console.log(fill(1, 5)); //=> [ 1, 2, 3, 4, 5 ]

console.log(fill(1, 5, { stringify: true })); //=> [ '1', '2', '3', '4', '5' ]

### options.toRegex

**Type**: boolean

**Default**: undefined

**Description**: Create a regex-compatible source string, instead of expanding values to an array.

**Example(s)**

// alphabetical range

console.log(fill('a', 'e', { toRegex: true })); //=> '[a-e]'

// alphabetical with step

console.log(fill('a', 'z', 3, { toRegex: true })); //=> 'a|d|g|j|m|p|s|v|y'

// numerical range

console.log(fill('1', '100', { toRegex: true })); //=> '[1-9]|[1-9][0-9]|100'

// numerical range with zero padding

console.log(fill('000001', '100000', { toRegex: true }));

//=> '0{5}[1-9]|0{4}[1-9][0-9]|0{3}[1-9][0-9]{2}|0{2}[1-9][0-9]{3}|0[1-9][0-9]{4}|100000'

### options.transform

**Type**: function

**Default**: undefined

**Description**: Customize each value in the returned array (or [string](#optionstoRegex)). *(you can also pass this function as the last argument to fill())*.

**Example(s)**

// add zero padding

console.log(fill(1, 5, value => String(value).padStart(4, '0')));

//=> ['0001', '0002', '0003', '0004', '0005']

## About

**Contributing** Pull requests and stars are always welcome. For bugs and feature requests, [please create an issue](http://../../issues/new).

**Running Tests** Running and reviewing unit tests is a great way to get familiarized with a library and its API. You can install dependencies and run tests with the following command:

$ npm install && npm test

**Building docs** *(This project's readme.md is generated by* [*verb*](https://github.com/verbose/verb-generate-readme)*, please don't edit the readme directly. Any changes to the readme must be made in the* [*.verb.md*](http://.verb.md) *readme template.)*

To generate the readme, run the following command:

$ npm install -g verbose/verb#dev verb-generate-readme && verb

### Contributors

| **Commits** | **Contributor** |
| --- | --- |
| 116 | [jonschlinkert](https://github.com/jonschlinkert) |
| 4 | [paulmillr](https://github.com/paulmillr) |
| 2 | [realityking](https://github.com/realityking) |
| 2 | [bluelovers](https://github.com/bluelovers) |
| 1 | [edorivai](https://github.com/edorivai) |
| 1 | [wtgtybhertgeghgtwtg](https://github.com/wtgtybhertgeghgtwtg) |

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