

the iterator and returns the next value. [Read more](#)

```
_hint(&self) -> (usize, Option<usize>)
```

the bounds on the remaining length of the iterator. [Read more](#)

```
&mut self, n: usize) -> Option<<Zip<A, B> as Iterator>::Item>
```

the nth element of the iterator. [Read more](#)

```
<Acc, F>(self, init: Acc, f: F) -> Acc
```

```
fnMut(Acc, <Zip<A, B> as Iterator>::Item) -> Acc,
```

ry element into an accumulator by applying an operation, returning the final result.

```
_chunk<const N: usize>(
```

```
    &mut self
```

```
    result:<[Self::Item; N], IntoIter<Self::Item, N>>
```

```
    : Sized,
```

this is a nightly-only experimental API. (`iter_next_chunk` [#98326](#))

the iterator and returns an array containing the next N values. [Read more](#)

```
count(self) -> usize
```

```
    : Sized,
```

the iterator, counting the number of iterations and returning it. [Read more](#)

```
last(self) -> Option<Self::Item>
```

```
    : Sized,
```

the iterator, returning the last element. [Read more](#)

```
advance_by(&mut self, n: usize) -> Result<(), NonZeroUsize>
```

```
where
  Self: Sized,
```

Creates an iterator starting at the same point, but stepping by the given amount at each iteration.  
[Read more](#)

```
fn chain<U>(self, other: U) -> Chain<Self, <U as
Iterator>::Iterator> ①
```

where

```
  Self: Sized,
  U: Iterator<Item = Self::Item>,
```

Takes two iterators and creates a new iterator over both in sequence. [Read more](#)

```
fn zip<U>(self, other: U) -> Zip<Self, <U as Iterator>::Iterator>
```

①

where

```
  Self: Sized,
  U: Iterator,
```

'Zips up' two iterators into a single iterator of pairs. [Read more](#)

```
fn intersperse_with<G>(self, separator: G) -> IntersperseWith<Self, G>
```

①

where

```
  Self: Sized,
  G: FnMut() -> Self::Item,
```

 This is a nightly-only experimental API. (`Iterator::intersperse` [#279524](#))

Creates a new iterator which places an item generated by `separator` between adjacent items of the original iterator. [Read more](#)

```
fn map<B, F>(self, f: F) -> Map<Self, F> ①
```

where

```
  Self: Sized,
  F: FnMut(Self::Item) -> B,
```

Takes a closure and creates an iterator which calls that closure on each element. [Read more](#)

```
fn for_each<F>(self, f: F)
```

where

```
  Self: Sized,
  F: FnMut(Self::Item),
```

Calls a closure on each element of an iterator. [Read more](#)

```
fn filter<P>(self, predicate: P) -> Filter<Self, P> ①
```

where

```
  Self: Sized,
  P: FnMut(&Self::Item) -> bool,
```

an iterator that both filters and maps. [Read more](#)

`enumerate(self) -> Enumerate<Self>` ⓘ

: Sized,

an iterator which gives the current iteration count as well as the next value. [Read](#)

`peekable(self) -> Peekable<Self>` ⓘ

: Sized,

an iterator which can use the [peek](#) and [peek\\_mut](#) methods to look at the next element without consuming it. See their documentation for more information. [Read](#)

`while<P>(self, predicate: P) -> SkipWhile<Self, P>` ⓘ

: Sized,

`Item::Item) -> bool,`

an iterator that [skip](#)s elements based on a predicate. [Read more](#)

`while<P>(self, predicate: P) -> TakeWhile<Self, P>` ⓘ

: Sized,

`Item::Item) -> bool,`

an iterator that yields elements based on a predicate. [Read more](#)

`while<B, P>(self, predicate: P) -> MapWhile<Self, P>` ⓘ

: Sized,

`Item) -> Option<B>,`

an iterator that both yields elements based on a predicate and maps. [Read more](#)

`(self, n: usize) -> Skip<Self>` ⓘ

: Sized,