

Test cases intended to document behavior and try to exhaustively explore the combinations.

## Confidence

These tests are not yet considered 100% normative, in that some aspects of the current behavior are not desirable. This is expressed in the "confidence" field in the following table. Values:

Confidence	Interpretation
100%	this will remain recommended behavior
75%	unclear whether we will continue to accept this
50%	this will likely be deprecated but remain valid
25%	this could change in the future
0%	this is definitely bogus and will likely change in the future in <i>some</i> way

## Tests

Test file	self type	Pattern	Current elision behavior	Confidence
self.rs	Struct	Self	ignore self parameter	100%
struct.rs	Struct	Struct	ignore self parameter	100%
alias.rs	Struct	Alias	ignore self parameter	100%
ref-self.rs	Struct	&Self	take lifetime from &Self	100%
ref-mut-self.rs	Struct	&mut Self	take lifetime from &mut Self	100%
ref-struct.rs	Struct	&Struct	take lifetime from &Self	50%
ref-mut-struct.rs	Struct	&mut Struct	take lifetime from &mut Self	50%
ref-alias.rs	Struct	&Alias	ignore Alias	0%
ref-mut-alias.rs	Struct	&mut Alias	ignore Alias	0%
lt-self.rs	Struct<'a>	Self	ignore Self (and hence 'a)	25%
lt-struct.rs	Struct<'a>	Self	ignore Self (and hence 'a)	0%
lt-alias.rs	Alias<'a>	Self	ignore Self (and hence 'a)	0%
lt-ref-self.rs	Struct<'a>	&Self	take lifetime from &Self	75%

In each case, we test the following patterns:

- self: XXX
- self: Box<XXX>
- self: Pin<XXX>
- self: Box<Box<XXX>>
- self: Box<Pin<XXX>>

In the non-reference cases, `Pin` causes errors so we substitute `Rc` .

### `async fn`

For each of the tests above we also check that `async fn` behaves as an `fn` would. These tests are in files named `*-async.rs` .

Legends:

- $\checkmark \Rightarrow$  Yes / Pass
- $X \Rightarrow$  No
- $\alpha \Rightarrow$  lifetime mismatch
- $\beta \Rightarrow$  cannot infer an appropriate lifetime
- $\gamma \Rightarrow$  missing lifetime specifier

<code>async file</code>	Pass?	Conforms to <code>fn</code> ?	How does it diverge? $fn \rightarrow async\ fn$
<code>self-async.rs</code>	$\checkmark$	$\checkmark$	N/A
<code>struct-async.rs</code>	$\checkmark$	$\checkmark$	N/A
<code>alias-async.rs</code>	$\checkmark$	$\checkmark$	N/A
<code>assoc-async.rs</code>	$\checkmark$	$\checkmark$	N/A
<code>ref-self-async.rs</code>	X	$\checkmark$	N/A
<code>ref-mut-self-async.rs</code>	X	$\checkmark$	N/A
<code>ref-struct-async.rs</code>	X	$\checkmark$	N/A
<code>ref-mut-struct-async.rs</code>	X	$\checkmark$	N/A
<code>ref-alias-async.rs</code>	$\checkmark$	$\checkmark$	N/A
<code>ref-assoc-async.rs</code>	$\checkmark$	$\checkmark$	N/A
<code>ref-mut-alias-async.rs</code>	$\checkmark$	$\checkmark$	N/A
<code>lt-self-async.rs</code>	$\checkmark$	$\checkmark$	N/A
<code>lt-struct-async.rs</code>	$\checkmark$	$\checkmark$	N/A
<code>lt-alias-async.rs</code>	$\checkmark$	$\checkmark$	N/A
<code>lt-assoc-async.rs</code>	$\checkmark$	$\checkmark$	N/A
<code>lt-ref-self-async.rs</code>	X	$\checkmark$	N/A