## Module std::option

This module defines the Option type and its methods to represent and handle an optional value.

Abstraction of a value that may or may not be present. Implemented with a vector of size zero or one because Move bytecode does not have ADTs.

The Option is in an invalid state for the operation attempted. The Option is Some while it should be None.

The Option is in an invalid state for the operation attempted. The Option is None while it should be Some.

Return an empty Option

Return an Option containing e

Return true if t does not hold a value

Return true if t holds a value

Return true if the value in t is equal to e ref Always returns false if t does not hold a value

Return an immutable reference to the value inside t Aborts if t does not hold a value

Return a reference to the value inside t if it holds one Return default ref if t does not hold a value

Return the value inside t if it holds one Return default if t does not hold a value

Convert the none option t to a some option by adding e. Aborts if t already holds a value

Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value

Return a mutable reference to the value inside t Aborts if t does not hold a value

Swap the old value inside t with e and return the old value Aborts if t does not hold a value

Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap\_or\_fill() allows for t not holding a value.

Destroys t. If t holds a value, return it. Returns default otherwise

Unpack t and return its contents Aborts if t does not hold a value

Unpack t Aborts if t holds a value

Convert t into a vector of length 1 if it is Some, and an empty vector otherwise

Destroy Option and call the closure f on the value inside if it holds one.

Destroy Option and call the closure f on the value inside if it holds one.

Execute a closure on the value inside t if it holds one.

Execute a closure on the mutable reference to the value inside t if it holds one.

Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b).

If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and\_then(f).

If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and\_then(f).

Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).

Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).

Return None if the value is None, otherwise return Option if the predicate f returns true.

Return false if the value is None, otherwise return the result of the predicate f.

Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap\_or(default).

Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function.

## **Struct**

Abstraction of a value that may or may not be present. Implemented with a vector of size zero or one because Move bytecode does not have ADTs.
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The Option is in an invalid state for the operation attempted. The Option is Some while it should be None.
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The Option is in an invalid state for the operation attempted. The Option is None while it should be Some.
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Return true if t holds a value
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Return true if the value in t is equal to e_ref Always returns false if t does not hold a value
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Return an immutable reference to the value inside t Aborts if t does not hold a value
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Return a reference to the value inside t if it holds one Return default_ref if t does not hold a value
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Return the value inside t if it holds one Return default if t does not hold a value
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Convert the none option t to a some option by adding e. Aborts if t already holds a value
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Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value
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Return a mutable reference to the value inside t Aborts if t does not hold a value
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Swap the old value inside t with e and return the old value Aborts if t does not hold a value
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Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), <a href="mailto:swap_or_fill()">swap_or_fill()</a> allows for t not holding a value.
<u>```bash</u>
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<u>```bash</u>
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Destroys t. If t holds a value, return it. Returns default otherwise
<u>```bash</u>
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<u>```bash</u>
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Unpack t and return its contents Aborts if t does not hold a value
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Unpack t Aborts if t holds a value
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Convert t into a vector of length 1 if it is Some, and an empty vector otherwise
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Destroy Option and call the closure fon the value inside if it holds one.

<u>```bash</u>
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<u>```bash</u>
Destroy Option and call the closure fon the value inside if it holds one.
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Execute a closure on the value inside t if it holds one.
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<del>'''</del>
Execute a closure on the mutable reference to the value inside t if it holds one.
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<u>```bash</u>
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Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b).
<u>```bash</u>
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<u>```bash</u>
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If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).
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If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).
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Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).
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Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).
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Return None if the value is None, otherwise return Option if the predicate f returns true.
<u>```bash</u>
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<u>```bash</u>
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Return false if the value is None, otherwise return the result of the predicate f.
<u>```bash</u>
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<u>```bash</u>
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Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).
Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function.
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Constants
The Option is in an invalid state for the operation attempted. The Option is Some while it should be None.
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Return true if the value in t is equal to e_ref Always returns false if t does not hold a value
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Return an immutable reference to the value inside t Aborts if t does not hold a value
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Return a reference to the value inside t if it holds one Return default_ref if t does not hold a value
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Return the value inside t if it holds one Return default if t does not hold a value
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Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value
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Return a mutable reference to the value inside t Aborts if t does not hold a value
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Swap the old value inside t with e and return the old value Aborts if t does not hold a value
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Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.
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Destroys t. If t holds a value, return it. Returns default otherwise

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<u>```bash</u>
Unpack t and return its contents Aborts if t does not hold a value
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Destroy Option and call the closure fon the value inside if it holds one.
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<u>```bash</u>
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Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b).
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If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).
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Return None if the value is None, otherwise return Option if the predicate f returns true.
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Execute a closure on the mutable reference to the value inside t if it holds one.

<u>```bash</u>
Return false if the value is None, otherwise return the result of the predicate f.
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<u>```bash</u>
Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).
Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function.
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<b>Function</b>
Return an empty Option
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<u>```bash</u>
Return an Option containing e
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<u>```bash</u>
Return true if t does not hold a value
<u>```bash</u>
<u>```bash</u>
Return true if t holds a value
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Return true if the value in t is equal to e_ref Always returns false if t does not hold a value
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Return an immutable reference to the value inside t Aborts if t does not hold a value
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Return a reference to the value inside t if it holds one Return default_ref if t does not hold a value
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Destroys t. If t holds a value, return it. Returns default otherwise
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Unpack t Aborts if t holds a value
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Convert t into a vector of length 1 if it is Some, and an empty vector otherwise
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Destroy Option and call the closure fon the value inside if it holds one.
<u>```bash</u>
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<u>```bash</u>
Execute a closure on the value inside t if it holds one.
<u>```bash</u>
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Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).
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Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).
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<u>```bash</u>
Return None if the value is None, otherwise return Option if the predicate f returns true.
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<u>```bash</u>
Return false if the value is None, otherwise return the result of the predicate f.
<u>```bash</u>
<u>```bash</u>
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Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).
Note: this function is a more efficient version of destroy_with_default, as it does not evaluate the default value unless necessary. The destroy_with_default function should be deprecated in favor of this function.
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<b>Function</b>
Return an Option containing e
<u>```bash</u>
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Return true if t does not hold a value
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<u></u>
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<u>```bash</u>
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Return true if the value in t is equal to e_ref Always returns false if t does not hold a value
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Return an immutable reference to the value inside t Aborts if t does not hold a value
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Return a reference to the value inside t if it holds one Return default_ref if t does not hold a value
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<u>```bash</u>
Unpack t Aborts if t holds a value
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<u>```bash</u>
Convert t into a vector of length 1 if it is Some, and an empty vector otherwise
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Destroy Option and call the closure f on the value inside if it holds one.
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<u>```bash</u>
<u></u>
Destroy Option and call the closure f on the value inside if it holds one.
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Execute a closure on the value inside t if it holds one.
<u>```bash</u>
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<u>```bash</u>
<u></u>
Execute a closure on the mutable reference to the value inside t if it holds one.
<u>```bash</u>
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<u>```bash</u>
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If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).

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<u>```bash</u>
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<b>Function</b>
Return true if t does not hold a value
<u>```bash</u>
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Return true if t holds a value
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Return true if the value in t is equal to e_ref Always returns false if t does not hold a value
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<u>```bash</u>
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Return an immutable reference to the value inside t Aborts if t does not hold a value
<u>```bash</u>
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$\underline{\text{Return a reference to the value inside t if it holds one Return default}\underline{\text{ref if t does not hold a value}}$
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Return the value inside t if it holds one Return default if t does not hold a value
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Convert the none option t to a some option by adding e. Aborts if t already holds a value

<u>```bash</u>
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Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value
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<u>```bash</u>
<u>```bash</u>
Execute a closure on the value inside t if it holds one.
<u>```bash</u>
<u>```bash</u>
<u>····</u>
Execute a closure on the mutable reference to the value inside t if it holds one.
<u>```bash</u>
····
<u>```bash</u>
Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b).
<u>```bash</u>

<u>```bash</u>
<u></u>
If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).
<u>```bash</u>
<u></u>
<u>```bash</u>
If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).
<u>```bash</u>
<u></u>
<u>```bash</u>
Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).
<u>```bash</u>
<u>```bash</u>
···
—
Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).
Rust's t. map (f).
Rust's t. map (f).  ""bash
Rust's t. map (f).  ""bash ""
Rust's t. map (f).  "bash "bash "bash
Rust's t. map (f).  ""bash  ""bash  "" —
Rust's t. map (f).  "bash "bash "  Return None if the value is None, otherwise return Option if the predicate f returns true.
Rust's t. map (f).  "bash " Return None if the value is None, otherwise return Option if the predicate f returns true. "bash "bash
Rust's t. map (f).  ""bash  ""bash  ""  Return None if the value is None, otherwise return Option if the predicate f returns true.  ""bash ""  ""bash
Rust's t. map (f).  ""bash ""  Return None if the value is None, otherwise return Option if the predicate f returns true.  ""bash ""  ""bash "" ""bash
Rust's t. map (f).  ""bash ""  Return None if the value is None, otherwise return Option if the predicate f returns true.  ""bash ""  ""bash "" ""bash "" ""bash ""
Rust's t. map (f).  "bash ""  Return None if the value is None, otherwise return Option if the predicate f returns true.  ""bash ""  "bash ""  Return false if the value is None, otherwise return the result of the predicate f.
Rust's t. map (f).  "bash ""  Return None if the value is None, otherwise return Option if the predicate f returns true.  "bash ""  Return false if the value is None, otherwise return the result of the predicate f.  "bash ""

Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap\_or(default).

Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function.
<u>```bash</u>
<u>```bash</u>
<u></u>
<b>Function</b>
Return true if t holds a value
<u>```bash</u>
<u></u>
<u>```bash</u>
<del>""</del>
Return true if the value in t is equal to e_ref Always returns false if t does not hold a value
<u>```bash</u>
<u></u>
<u>```bash</u>
<u></u>
Return an immutable reference to the value inside t Aborts if t does not hold a value
<u>```bash</u>
<u>```bash</u>
Return a reference to the value inside t if it holds one Return default_ref if t does not hold a value
<u>```bash</u>
<u>```bash</u>
Return the value inside t if it holds one Return default if t does not hold a value
<u>```bash</u>
<del></del>
<u>```bash</u>
<del></del>
Convert the none option t to a some option by adding e. Aborts if t already holds a value

```bash

| <u></u>                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value                                                             |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Return a mutable reference to the value inside t Aborts if t does not hold a value                                                                                                |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Swap the old value inside t with e and return the old value Aborts if t does not hold a value                                                                                     |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value. |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Destroys t. If t holds a value, return it. Returns default otherwise                                                                                                              |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Unpack t and return its contents Aborts if t does not hold a value                                                                                                                |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |

| Unpack t Aborts if t holds a value                                                                          |
|-------------------------------------------------------------------------------------------------------------|
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise                            |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Destroy Option and call the closure f on the value inside if it holds one.                                  |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Destroy Option and call the closure fon the value inside if it holds one.                                   |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Execute a closure on the value inside t if it holds one.                                                    |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| ```bash                                                                                                     |

| <del>-</del>                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                            |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                            |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).                                                  |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f). |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Return None if the value is None, otherwise return Option if the predicate f returns true.                                                             |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Return false if the value is None, otherwise return the result of the predicate f.                                                                     |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
|                                                                                                                                                        |

Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap\_or(default).

Note: this function is a more efficient version of destroy\_with\_default, as it does not evaluate the default value unless necessary. The destroy\_with\_default function should be deprecated in favor of this function.

| <u>```bash</u>                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------|
|                                                                                                                       |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| <b>Function</b>                                                                                                       |
| Return true if the value in t is equal to e_ref Always returns false if t does not hold a value                       |
| <u>```bash</u>                                                                                                        |
| <del></del>                                                                                                           |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| Return an immutable reference to the value inside t Aborts if t does not hold a value                                 |
| <u>```bash</u>                                                                                                        |
| <u></u>                                                                                                               |
| <u>```bash</u>                                                                                                        |
| <u></u>                                                                                                               |
| Return a reference to the value inside t if it holds one Return default_ref if t does not hold a value                |
| <u>```bash</u>                                                                                                        |
| <u></u>                                                                                                               |
| <u>```bash</u>                                                                                                        |
| <u></u>                                                                                                               |
| Return the value inside t if it holds one Return default if t does not hold a value                                   |
| <u>```bash</u>                                                                                                        |
| <u></u>                                                                                                               |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value                             |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| ```hash                                                                                                               |

| Return a mutable reference to the value inside t Aborts if t does not hold a value                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Swap the old value inside t with e and return the old value Aborts if t does not hold a value                                                                                     |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| <u>```bash</u>                                                                                                                                                                    |
| <del></del>                                                                                                                                                                       |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value. |
| <u>```bash</u>                                                                                                                                                                    |
| <del></del>                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Destroys t. If t holds a value, return it. Returns default otherwise                                                                                                              |
| <u>```bash</u>                                                                                                                                                                    |
| <del></del>                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
|                                                                                                                                                                                   |
| Unpack t and return its contents Aborts if t does not hold a value                                                                                                                |
| Unpack t and return its contents Aborts if t does not hold a value ""bash                                                                                                         |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
| <u>```bash</u>                                                                                                                                                                    |
| <u>```bash</u> <u>```bash</u>                                                                                                                                                     |
| <u>```bash</u> <u>```</u> <u>```bash</u> <u>```</u>                                                                                                                               |
| "bash "bash "bash " Unpack t Aborts if t holds a value                                                                                                                            |
| ""bash ""bash "" Unpack t Aborts if t holds a value ""bash                                                                                                                        |
| "bash "" Unpack t Aborts if t holds a value ""bash ""                                                                                                                             |
| ""bash "" Unpack t Aborts if t holds a value ""bash "" "" ""bash                                                                                                                  |

| _                                                                                                           |
|-------------------------------------------------------------------------------------------------------------|
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Destroy Option and call the closure f on the value inside if it holds one.                                  |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Destroy Option and call the closure f on the value inside if it holds one.                                  |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| ····                                                                                                        |
| Execute a closure on the value inside t if it holds one.                                                    |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |

| <u>```bash</u>                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).                                                                                                                  |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).                                                                 |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Return None if the value is None, otherwise return Option if the predicate f returns true.                                                                                                                             |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Return false if the value is None, otherwise return the result of the predicate f.                                                                                                                                     |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).                                                                                           |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
|                                                                                                                                                                                                                        |

## **Function**

Return an immutable reference to the value inside t Aborts if t does not hold a value

| <u>```bash</u>                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------|
| <u></u>                                                                                                               |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| Return a reference to the value inside t if it holds one Return default_ref if t does not hold a value                |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| Return the value inside t if it holds one Return default if t does not hold a value                                   |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value                             |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| Return a mutable reference to the value inside t Aborts if t does not hold a value                                    |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| <u>```bash</u>                                                                                                        |
|                                                                                                                       |
| Swap the old value inside t with e and return the old value Aborts if t does not hold a value                         |
| <u>```bash</u>                                                                                                        |
| <u></u>                                                                                                               |
| <u>```bash</u>                                                                                                        |
| ···                                                                                                                   |

| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| Destroys t. If t holds a value, return it. Returns default otherwise                                                                                                              |
| <u>```bash</u>                                                                                                                                                                    |
| <del></del>                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                    |
| <del></del>                                                                                                                                                                       |
| Unpack t and return its contents Aborts if t does not hold a value                                                                                                                |
| <u>```bash</u>                                                                                                                                                                    |
| <del></del>                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| Unpack t Aborts if t holds a value                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise                                                                                                  |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Destroy Option and call the closure f on the value inside if it holds one.                                                                                                        |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Destroy Option and call the closure f on the value inside if it holds one.                                                                                                        |
| <u>```bash</u>                                                                                                                                                                    |

| <u>bash</u>                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u></u>                                                                                                                                                |
| Execute a closure on the value inside t if it holds one.                                                                                               |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| Execute a closure on the mutable reference to the value inside t if it holds one.                                                                      |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b).                                            |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                             |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                             |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).                                                  |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f). |

| <u>```bash</u>                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Return None if the value is None, otherwise return Option if the predicate f returns true.                                                                                                                             |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Return false if the value is None, otherwise return the result of the predicate f.                                                                                                                                     |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).                                                                                           |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <b>Function</b>                                                                                                                                                                                                        |
| Return a reference to the value inside t if it holds one Return default_ref if t does not hold a value                                                                                                                 |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Return the value inside t if it holds one Return default if t does not hold a value                                                                                                                                    |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value                                                                                                                              |
| <u>```bash</u>                                                                                                                                                                                                         |

| <u>```bash</u>                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                   |
| Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value                                                             |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Return a mutable reference to the value inside t Aborts if t does not hold a value                                                                                                |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Swap the old value inside t with e and return the old value Aborts if t does not hold a value                                                                                     |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value. |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Destroys t. If t holds a value, return it. Returns default otherwise                                                                                                              |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Unpack t and return its contents Aborts if t does not hold a value                                                                                                                |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
| ···                                                                                                                                                                               |

| <u>Unpack t Aborts if t holds a value</u>                                                                   |
|-------------------------------------------------------------------------------------------------------------|
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise                            |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Destroy Option and call the closure f on the value inside if it holds one.                                  |
| <u>```bash</u>                                                                                              |
| <u>····</u>                                                                                                 |
| <u>```bash</u>                                                                                              |
| ····                                                                                                        |
| Destroy Option and call the closure f on the value inside if it holds one.                                  |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Execute a closure on the value inside t if it holds one.                                                    |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |

| <del>-</del>                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                            |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                            |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).                                                  |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f). |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Return None if the value is None, otherwise return Option if the predicate f returns true.                                                             |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Return false if the value is None, otherwise return the result of the predicate f.                                                                     |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
|                                                                                                                                                        |

Note: this function is a more efficient version of destroy\_with\_default, as it does not evaluate the default value unless necessary. The destroy\_with\_default function should be deprecated in favor of this function.

| <u>```bash</u>                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u></u>                                                                                                                                                                           |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| <b>Function</b>                                                                                                                                                                   |
| Return the value inside t if it holds one Return default if t does not hold a value                                                                                               |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value                                                                                         |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value                                                             |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
| <del></del>                                                                                                                                                                       |
| Return a mutable reference to the value inside t Aborts if t does not hold a value                                                                                                |
| <u>```bash</u>                                                                                                                                                                    |
| <del></del>                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| Swap the old value inside t with e and return the old value Aborts if t does not hold a value                                                                                     |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value. |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |

| <u>```bash</u>                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u></u>                                                                                                                                                                                                                                                                            |
| Destroys t. If t holds a value, return it. Returns default otherwise                                                                                                                                                                                                               |
| <u>```bash</u>                                                                                                                                                                                                                                                                     |
| <u></u>                                                                                                                                                                                                                                                                            |
| <u>```bash</u>                                                                                                                                                                                                                                                                     |
| <u></u>                                                                                                                                                                                                                                                                            |
| Unpack t and return its contents Aborts if t does not hold a value                                                                                                                                                                                                                 |
| <u>```bash</u>                                                                                                                                                                                                                                                                     |
| ····                                                                                                                                                                                                                                                                               |
| <u>```bash</u>                                                                                                                                                                                                                                                                     |
| ····                                                                                                                                                                                                                                                                               |
| Unpack t Aborts if t holds a value                                                                                                                                                                                                                                                 |
| <u>```bash</u>                                                                                                                                                                                                                                                                     |
| <u></u>                                                                                                                                                                                                                                                                            |
| <u>```bash</u>                                                                                                                                                                                                                                                                     |
| <u></u>                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                    |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise                                                                                                                                                                                                   |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise  ""bash                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                    |
| <u>```bash</u>                                                                                                                                                                                                                                                                     |
| <u>```bash</u>                                                                                                                                                                                                                                                                     |
| <u>```bash</u> <u>```bash</u>                                                                                                                                                                                                                                                      |
| ****bash  ****bash  ****                                                                                                                                                                                                                                                           |
| ""bash ""bash "" Destroy Option and call the closure f on the value inside if it holds one.                                                                                                                                                                                        |
| ""bash ""bash ""  Destroy Option and call the closure f on the value inside if it holds one. ""bash                                                                                                                                                                                |
| ""bash "" Destroy Option and call the closure fon the value inside if it holds one. ""bash ""                                                                                                                                                                                      |
| ""bash ""  Destroy Option and call the closure f on the value inside if it holds one. ""bash "" ""bash                                                                                                                                                                             |
| ""bash ""  Destroy Option and call the closure f on the value inside if it holds one. ""bash ""  ""bash "" ""bash ""                                                                                                                                                               |
| ""bash ""  Destroy Option and call the closure f on the value inside if it holds one. ""bash ""  ""bash ""  Destroy Option and call the closure f on the value inside if it holds one.                                                                                             |
| ""bash ""  Destroy Option and call the closure f on the value inside if it holds one. ""bash ""  Destroy Option and call the closure f on the value inside if it holds one. ""bash ""  Destroy Option and call the closure f on the value inside if it holds one. ""bash           |
| ""bash "" Destroy Option and call the closure f on the value inside if it holds one. ""bash "" Destroy Option and call the closure f on the value inside if it holds one. ""bash "" Destroy Option and call the closure f on the value inside if it holds one. ""bash ""           |
| ""bash ""  Destroy Option and call the closure f on the value inside if it holds one. ""bash ""  Destroy Option and call the closure f on the value inside if it holds one. ""bash ""  Destroy Option and call the closure f on the value inside if it holds one. ""bash "" ""bash |

| <del></del>                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Execute a closure on the mutable reference to the value inside t if it holds one.                                                                      |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b).                                            |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                            |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                            |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).                                                  |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f). |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |

| Return None if the value is None, otherwise return Option if the predicate f returns true.                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                   |
| <del></del>                                                                                                                                                                                                                                                                                                                                      |
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                   |
| <del>'''</del>                                                                                                                                                                                                                                                                                                                                   |
| Return false if the value is None, otherwise return the result of the predicate f.                                                                                                                                                                                                                                                               |
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                   |
| <u></u>                                                                                                                                                                                                                                                                                                                                          |
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                   |
| <del></del>                                                                                                                                                                                                                                                                                                                                      |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).                                                                                                                                                                                                                     |
| Note: this function is a more efficient version of destroy_with_default, as it does not evaluate the default value unless necessary. The destroy_with_default function should be deprecated in favor of this function.                                                                                                                           |
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                  |
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                  |
| <b>Function</b>                                                                                                                                                                                                                                                                                                                                  |
| Function  Convert the none option t to a some option by adding e. Aborts if t already holds a value                                                                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                  |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value                                                                                                                                                                                                                                                        |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value  ""bash                                                                                                                                                                                                                                                |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value  ""bash ""                                                                                                                                                                                                                                             |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value  "bash "bash "bash                                                                                                                                                                                                                                     |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value  "bash "bash "bash "hash                                                                                                                                                                                                                               |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value  "bash "bash " Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value                                                                                                                   |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value  "bash " Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value "bash                                                                                                                   |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value  "bash "bash " Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value "bash " "                                                                                                         |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value  "bash " Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value "bash " " " " " " " " " " " " " " " " " " "                                                                             |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value  "bash "  Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value  "bash " " "bash " " " "bash " " " " " " " " " " " " " " " " " " "                                                     |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value  ""bash  ""  Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value  ""bash  ""  ""  ""  ""  Return a mutable reference to the value inside t Aborts if t does not hold a value         |
| Convert the none option t to a some option by adding e. Aborts if t already holds a value  ""bash  ""  Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value  ""bash  ""  ""bash  ""  Return a mutable reference to the value inside t Aborts if t does not hold a value  ""bash |

Swap the old value inside t with e and return the old value Aborts if t does not hold a value

| <u>```bash</u>                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u></u>                                                                                                                                                                                                               |
| <u>```bash</u>                                                                                                                                                                                                        |
|                                                                                                                                                                                                                       |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), <a href="mailto:swap_or_fill()">swap_or_fill()</a> allows for t not holding a value. |
| <u>```bash</u>                                                                                                                                                                                                        |
|                                                                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                                                        |
|                                                                                                                                                                                                                       |
| Destroys t. If t holds a value, return it. Returns default otherwise                                                                                                                                                  |
| <u>```bash</u>                                                                                                                                                                                                        |
|                                                                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                                                        |
| <u></u>                                                                                                                                                                                                               |
| Unpack t and return its contents Aborts if t does not hold a value                                                                                                                                                    |
| <u>```bash</u>                                                                                                                                                                                                        |
|                                                                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                                                        |
| <u></u>                                                                                                                                                                                                               |
| Unpack t Aborts if t holds a value                                                                                                                                                                                    |
| <u>```bash</u>                                                                                                                                                                                                        |
|                                                                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                                                        |
|                                                                                                                                                                                                                       |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise                                                                                                                                      |
| <u>```bash</u>                                                                                                                                                                                                        |
|                                                                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                                                        |
|                                                                                                                                                                                                                       |
| Destroy Option and call the closure f on the value inside if it holds one.                                                                                                                                            |
| <u>```bash</u>                                                                                                                                                                                                        |
| <u></u>                                                                                                                                                                                                               |
| <u>```bash</u>                                                                                                                                                                                                        |

| <del>_</del>                                                                                                |
|-------------------------------------------------------------------------------------------------------------|
| Destroy Option and call the closure f on the value inside if it holds one.                                  |
| <u>```bash</u>                                                                                              |
| <u>····</u>                                                                                                 |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Execute a closure on the value inside t if it holds one.                                                    |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f). |
| <u>```bash</u>                                                                                              |
| ···                                                                                                         |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>                                                                                              |
| <u>····</u>                                                                                                 |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).       |
| <u>```bash</u>                                                                                              |
|                                                                                                             |

\*\*\*

| <u>```bash</u>                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u></u>                                                                                                                                                                                                                |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).                                                                 |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| Return None if the value is None, otherwise return Option if the predicate f returns true.                                                                                                                             |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
| <del></del>                                                                                                                                                                                                            |
| Return false if the value is None, otherwise return the result of the predicate f.                                                                                                                                     |
| <u>```bash</u>                                                                                                                                                                                                         |
| <del></del>                                                                                                                                                                                                            |
| <u>```bash</u>                                                                                                                                                                                                         |
| <del></del>                                                                                                                                                                                                            |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).                                                                                           |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| "bash                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                        |
|                                                                                                                                                                                                                        |
| NII                                                                                                                                                                                |
|                                                                                                                                                                                                                        |
| <u>Function</u>                                                                                                                                                                                                        |
| Convert a some option to a none by removing and returning the value stored inside t Aborts if t does not hold a value                                                                                                  |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Return a mutable reference to the value inside t Aborts if t does not hold a value                                                                                                                                     |
| <u>```bash</u>                                                                                                                                                                                                         |
| <del></del>                                                                                                                                                                                                            |

| <u>```bash</u>                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u> </u>                                                                                                                                                                                                 |
| Swap the old value inside t with e and return the old value Aborts if t does not hold a value                                                                                                            |
| <u>```bash</u>                                                                                                                                                                                           |
| <del>'''</del>                                                                                                                                                                                           |
| <u>```bash</u>                                                                                                                                                                                           |
| <del>'''</del>                                                                                                                                                                                           |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), $\underline{\text{swap\_or\_fill()}}$ allows for t not holding a value. |
| <u>```bash</u>                                                                                                                                                                                           |
|                                                                                                                                                                                                          |
| <u>```bash</u>                                                                                                                                                                                           |
| <u></u>                                                                                                                                                                                                  |
| Destroys t. If t holds a value, return it. Returns default otherwise                                                                                                                                     |
| <u>```bash</u>                                                                                                                                                                                           |
| <u></u>                                                                                                                                                                                                  |
| <u>```bash</u>                                                                                                                                                                                           |
| <del>'''</del>                                                                                                                                                                                           |
| Unpack t and return its contents Aborts if t does not hold a value                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                                           |
| <del>'''</del>                                                                                                                                                                                           |
| <u>```bash</u>                                                                                                                                                                                           |
| <u></u>                                                                                                                                                                                                  |
| Unpack t Aborts if t holds a value                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                                           |
| <u></u>                                                                                                                                                                                                  |
| <u>```bash</u>                                                                                                                                                                                           |
| <u></u>                                                                                                                                                                                                  |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise                                                                                                                         |
| <u>```bash</u>                                                                                                                                                                                           |
| <u></u>                                                                                                                                                                                                  |
| <u>```bash</u>                                                                                                                                                                                           |
| <del>'''</del>                                                                                                                                                                                           |

Destroy Option and call the closure fon the value inside if it holds one.

| <u>```bash</u>                                                                                              |
|-------------------------------------------------------------------------------------------------------------|
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Destroy Option and call the closure fon the value inside if it holds one.                                   |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Execute a closure on the value inside t if it holds one.                                                    |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| ···                                                                                                         |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| <u>```bash</u>                                                                                              |
| ····                                                                                                        |

| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).                                                                 |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| Return None if the value is None, otherwise return Option if the predicate f returns true.                                                                                                                             |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| Return false if the value is None, otherwise return the result of the predicate f.                                                                                                                                     |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).                                                                                           |
| Note: this function is a more efficient version of destroy_with_default, as it does not evaluate the default value unless necessary. The destroy_with_default function should be deprecated in favor of this function. |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <b>Function</b>                                                                                                                                                                                                        |
| Return a mutable reference to the value inside t Aborts if t does not hold a value                                                                                                                                     |
| <u>```bash</u>                                                                                                                                                                                                         |
| <del></del>                                                                                                                                                                                                            |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |

| <u>```bash</u>                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value. |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Destroys t. If t holds a value, return it. Returns default otherwise                                                                                                              |
| <u>```bash</u>                                                                                                                                                                    |
| <u></u>                                                                                                                                                                           |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Unpack t and return its contents Aborts if t does not hold a value                                                                                                                |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Unpack t Aborts if t holds a value                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise                                                                                                  |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |
| Destroy Option and call the closure fon the value inside if it holds one.                                                                                                         |
| <u>```bash</u>                                                                                                                                                                    |
|                                                                                                                                                                                   |

Swap the old value inside t with e and return the old value Aborts if t does not hold a value

| <u>```bash</u>                                                                                              |
|-------------------------------------------------------------------------------------------------------------|
| <u></u>                                                                                                     |
| Destroy Option and call the closure fon the value inside if it holds one.                                   |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Execute a closure on the value inside t if it holds one.                                                    |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f). |
| <u>```bash</u>                                                                                              |
| <del></del>                                                                                                 |
| <u>```bash</u>                                                                                              |
| <u>···</u>                                                                                                  |
|                                                                                                             |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).       |

| <u>```bash</u>                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u></u>                                                                                                                                                                                                                |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).                                                                 |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Return None if the value is None, otherwise return Option if the predicate f returns true.                                                                                                                             |
| <u>```bash</u>                                                                                                                                                                                                         |
| <del></del>                                                                                                                                                                                                            |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Return false if the value is None, otherwise return the result of the predicate f.                                                                                                                                     |
| <u>```bash</u>                                                                                                                                                                                                         |
| <del></del>                                                                                                                                                                                                            |
| <u>```bash</u>                                                                                                                                                                                                         |
| <del></del>                                                                                                                                                                                                            |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).                                                                                           |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <b>Function</b>                                                                                                                                                                                                        |
| Swap the old value inside t with e and return the old value Aborts if t does not hold a value                                                                                                                          |
| <u>```bash</u>                                                                                                                                                                                                         |
| <del></del>                                                                                                                                                                                                            |
| <u>```bash</u>                                                                                                                                                                                                         |
| <del></del>                                                                                                                                                                                                            |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.                                      |
| <u>```bash</u>                                                                                                                                                                                                         |

| _                                                                                |
|----------------------------------------------------------------------------------|
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| Destroys t. If t holds a value, return it. Returns default otherwise             |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| Unpack t and return its contents Aborts if t does not hold a value               |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| Unpack t Aborts if t holds a value                                               |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| Destroy Option and call the closure fon the value inside if it holds one.        |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| Destroy Option and call the closure f on the value inside if it holds one.       |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| <u>```bash</u>                                                                   |
| <u></u>                                                                          |
| Execute a closure on the value inside t if it holds one.                         |

| <u>```bash</u>                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| Execute a closure on the mutable reference to the value inside t if it holds one.                                                                      |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b).                                            |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                            |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                            |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).                                                  |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f). |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |

| Return None if the value is None, otherwise return Option if the predicate f returns true.                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                       |
| Return false if the value is None, otherwise return the result of the predicate f.                                                                                                                                                                                                                                                                    |
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                        |
| <u></u>                                                                                                                                                                                                                                                                                                                                               |
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                        |
| <u></u>                                                                                                                                                                                                                                                                                                                                               |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).                                                                                                                                                                                                                          |
| Note: this function is a more efficient version of destroy_with_default, as it does not evaluate the default value unless necessary. The destroy_with_default function should be deprecated in favor of this function.                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                        |
| <u></u>                                                                                                                                                                                                                                                                                                                                               |
| <u>```bash</u>                                                                                                                                                                                                                                                                                                                                        |
| <u></u>                                                                                                                                                                                                                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                       |
| <b>Function</b>                                                                                                                                                                                                                                                                                                                                       |
| Function  Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap or fill() allows for t not holding a value.                                                                                                                                                           |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(),                                                                                                                                                                                                                      |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.                                                                                                                                                                     |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.  ""bash                                                                                                                                                             |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.  ""bash ""                                                                                                                                                          |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.  ""bash ""bash                                                                                                                                                      |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.  ""bash ""bash ""                                                                                                                                                   |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.  ""bash "" Destroys t. If t holds a value, return it. Returns default otherwise                                                                                     |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.  ""bash "" Destroys t. If t holds a value, return it. Returns default otherwise ""bash                                                                              |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.  "bash "bash " Destroys t. If t holds a value, return it. Returns default otherwise "bash " "                                                                       |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.  ""bash "" Destroys t. If t holds a value, return it. Returns default otherwise ""bash "" ""bash "" ""bash                                                          |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.  "bash " Destroys t. If t holds a value, return it. Returns default otherwise "bash " " "bash " " "bash " " "bash " " " "bash " " " " " " " " " " " " " " " " " " " |
| Swap the old value inside t with e and return the old value; or if there is no old value, fill it with e. Different from swap(), swap_or_fill() allows for t not holding a value.  "bash "  Destroys t. If t holds a value, return it. Returns default otherwise "bash "  "  "bash "  "  "  "  "  "  "  "  "  "  "  "  "                              |

| <u></u>                                                                                                     |
|-------------------------------------------------------------------------------------------------------------|
| Unpack t Aborts if t holds a value                                                                          |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise                            |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| Destroy Option and call the closure f on the value inside if it holds one.                                  |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Destroy Option and call the closure f on the value inside if it holds one.                                  |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Execute a closure on the value inside t if it holds one.                                                    |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>                                                                                              |
| <u></u>                                                                                                     |
| <u>```bash</u>                                                                                              |
|                                                                                                             |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>                                                                                              |
|                                                                                                             |

| <u>bash</u>                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                        |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                             |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                                             |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).                                                  |
| <u>```bash</u>                                                                                                                                         |
| <u></u>                                                                                                                                                |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f). |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Return None if the value is None, otherwise return Option if the predicate f returns true.                                                             |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| Return false if the value is None, otherwise return the result of the predicate f.                                                                     |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                         |
|                                                                                                                                                        |

| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <b>Function</b>                                                                                                                                                                                                        |
| Destroys t. If t holds a value, return it. Returns default otherwise                                                                                                                                                   |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| Unpack t and return its contents Aborts if t does not hold a value                                                                                                                                                     |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Unpack t Aborts if t holds a value                                                                                                                                                                                     |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise                                                                                                                                       |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| Destroy Option and call the closure f on the value inside if it holds one.                                                                                                                                             |
| <u>```bash</u>                                                                                                                                                                                                         |
|                                                                                                                                                                                                                        |
| <u>```bash</u>                                                                                                                                                                                                         |
| <u></u>                                                                                                                                                                                                                |
| Destroy Option and call the closure f on the value inside if it holds one.                                                                                                                                             |

```bash

| <u>```bash</u>  |
|---|
|   |
| Execute a closure on the value inside t if it holds one.  |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
|   |
| Execute a closure on the mutable reference to the value inside t if it holds one.   |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
|   |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b).                         |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
|   |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                         |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
|   |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                         |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
|   |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).                               |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
|   |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to |

| Rust's t. map (f).   |
|--|
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Return None if the value is None, otherwise return Option if the predicate f returns true.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
|  |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).   |
| Note: this function is a more efficient version of destroy_with_default, as it does not evaluate the default value unless necessary. The destroy_with_default function should be deprecated in favor of this function. |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| <b>Function</b>  |
| Unpack t and return its contents Aborts if t does not hold a value   |
| <u>```bash</u>   |
| <del></del>  |
| <u>```bash</u>   |
| <del></del>  |
| Unpack t Aborts if t holds a value   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise   |

| <u>```bash</u>  |
|---|
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| Destroy Option and call the closure fon the value inside if it holds one.                                   |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| Destroy Option and call the closure fon the value inside if it holds one.                                   |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <del></del>   |
| Execute a closure on the value inside t if it holds one.  |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>  |
| <del></del>   |
| <u>```bash</u>  |
| <u></u>   |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>  |
| <del></del>   |
| <u>```bash</u>  |
| <u></u>   |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
|   |

| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
|--|
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).  |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Return None if the value is None, otherwise return Option if the predicate f returns true.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).   |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |

## **Function**

| Unpack t Aborts if t holds a value  |
|---|
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
| <u></u>   |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise                            |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
| <u></u>   |
| Destroy Option and call the closure f on the value inside if it holds one.                                  |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| ····  |
| Destroy Option and call the closure fon the value inside if it holds one.                                   |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| ····  |
| Execute a closure on the value inside t if it holds one.  |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
| <u></u>   |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
| <u></u>   |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |

| <del>-</del>   |
|--|
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).  |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
|  |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f). |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Return None if the value is None, otherwise return Option if the predicate f returns true.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
|  |

Note: this function is a more efficient version of destroy\_with\_default, as it does not evaluate the default value unless necessary. The destroy\_with\_default function should be deprecated in favor of this function.

| <u>```bash</u>  |
|---|
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| <u>Function</u>   |
| Convert t into a vector of length 1 if it is Some, and an empty vector otherwise                            |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| Destroy Option and call the closure fon the value inside if it holds one.                                   |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| Destroy Option and call the closure fon the value inside if it holds one.                                   |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
|   |
| Execute a closure on the value inside t if it holds one.  |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
| <del></del>   |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>  |
| <u></u>   |
| ```hash   |

| <del>-</del>   |
|--|
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).  |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f). |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
|  |
| Return None if the value is None, otherwise return Option if the predicate f returns true.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
|  |

Note: this function is a more efficient version of destroy\_with\_default, as it does not evaluate the default value unless necessary. The destroy\_with\_default function should be deprecated in favor of this function.

| <u>```bash</u>  |
|---|
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| Macro function  |
| Destroy Option and call the closure fon the value inside if it holds one.                                   |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| Destroy Option and call the closure fon the value inside if it holds one.                                   |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| Execute a closure on the value inside t if it holds one.  |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |

| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
|--|
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).  |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Return None if the value is None, otherwise return Option if the predicate f returns true.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).   |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
| <u></u>  |

**Macro function** 

| <u>```bash</u>  |
|---|
| <u></u>   |
| <u>```bash</u>  |
|   |
| Execute a closure on the value inside t if it holds one.  |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
|   |
| Execute a closure on the mutable reference to the value inside t if it holds one.                           |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
|   |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b). |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |
| <u></u>   |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
|   |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
|   |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).       |
| <u>```bash</u>  |
| <u></u>   |
| <u>```bash</u>  |

Destroy Option and call the closure fon the value inside if it holds one.

| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).   |
|--|
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Return None if the value is None, otherwise return Option if the predicate f returns true.   |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).   |
| Note: this function is a more efficient version of destroy_with_default, as it does not evaluate the default value unless necessary. The destroy_with_default function should be deprecated in favor of this function. |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Macro function   |
| Execute a closure on the value inside t if it holds one.   |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Execute a closure on the mutable reference to the value inside t if it holds one.  |
| <u>```bash</u>   |
| <u></u>  |
| ```bash  |

| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b).  |
|--|
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).  |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f). |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Return None if the value is None, otherwise return Option if the predicate f returns true.   |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| ```hash  |

| <u>```bash</u>   |
|--|
|  |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).   |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Macro function   |
| Execute a closure on the mutable reference to the value inside t if it holds one.  |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b).  |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).  |
| <u>```bash</u>   |
| <u></u>  |

| <u>```bash</u>   |
|--|
| <u></u>  |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).   |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Return None if the value is None, otherwise return Option if the predicate f returns true.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
| <del></del>  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
| <del></del>  |
| <u>```bash</u>   |
| <del></del>  |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).   |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| <u>```bash</u>   |
| <del></del>  |
| <u>```bash</u>   |
| <del></del>  |
| Macro function   |
| Select the first Some value from the two options, or None if both are None. Equivalent to Rust's a. or (b).  |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
| <u></u>  |
| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(f).  |
| <u>```bash</u>   |
| <u></u>  |

| <u>```bash</u>   |
|--|
|  |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).   |
| <u>```bash</u>   |
| <del></del>  |
| <u>```bash</u>   |
| <del></del>  |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).  |
| <u>```bash</u>   |
| <del></del>  |
| <u>```bash</u>   |
| <del></del>  |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f).   |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
|  |
| Return None if the value is None, otherwise return Option if the predicate freturns true.  |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
| <u></u>  |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).   |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
|  |

## **Macro function**

| If the value is Some, call the closure f on it. Otherwise, return None. Equivalent to Rust's t.and_then(t).                         |
|---|
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
| <u></u>   |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).                          |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
|   |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).                               |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
| <u></u>   |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to |
| Rust's t. map (f).  |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
|   |
| Return None if the value is None, otherwise return Option if the predicate f returns true.  |
| <u>```bash</u>  |
| <del></del>   |
| <u>```bash</u>  |
|   |
| Return false if the value is None, otherwise return the result of the predicate f.  |
| <u>```bash</u>  |
|   |
| <u>```bash</u>  |
|   |
|   |

<u>Destroy Option</u> and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap\_or(default).

Note: this function is a more efficient version of  $\frac{\text{destroy}}{\text{destroy}}$  with  $\frac{\text{default}}{\text{destroy}}$ , as it does not evaluate the default value unless necessary. The  $\frac{\text{destroy}}{\text{destroy}}$  with  $\frac{\text{default}}{\text{destroy}}$  function should be deprecated in favor of this function.

| <u>```bash</u>   |
|--|
|  |
| <u>```bash</u>   |
|  |
| Macro function   |
| If the value is Some, call the closure fon it. Otherwise, return None. Equivalent to Rust's t.and_then(f).   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Map an Option to Option by applying a function to a contained value. Equivalent to Rust's t. map (f).  |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to Rust's t. map (f). |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Return None if the value is None, otherwise return Option if the predicate f returns true.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's Lunwrap, or default).                           |

Note: this function is a more efficient version of  $\frac{destroy\_with\_default}{destroy\_with\_default}$ , as it does not evaluate the default value unless necessary. The  $\frac{destroy\_with\_default}{destroy\_with\_default}$  function should be deprecated in favor of this function.

## **Macro function**

| Rust's t. map (f).   |
|--|
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Return None if the value is None, otherwise return Option if the predicate f returns true.   |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <u></u>  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
| <u>····</u>  |
| <u>```bash</u>   |
| <u></u>  |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).   |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Macro function   |
| Return None if the value is None, otherwise return Option if the predicate f returns true.   |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <del></del>  |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
| <del></del>  |
| <u>```bash</u>   |
| ···  |

Map an Option value to Option by applying a function to a contained value by reference. Original Option is preserved. Equivalent to

| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
|--|
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <del></del>  |
| Macro function   |
| Return false if the value is None, otherwise return the result of the predicate f.   |
| <u>```bash</u>   |
| <del></del>  |
| <u>```bash</u>   |
|  |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).   |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| <u>```bash</u>   |
|  |
| <u>```bash</u>   |
|  |
| Macro function   |
| Destroy Option and return the value inside if it holds one, or default otherwise. Equivalent to Rust's t.unwrap_or(default).   |
| Note: this function is a more efficient version of destroy with default, as it does not evaluate the default value unless necessary. The destroy with default function should be deprecated in favor of this function. |
| <u>```bash</u>   |
| <u></u>  |
| <u>```bash</u>   |
| <del></del>  |
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