

## Module std::u64

Returns the bitwise not of the value. Each bit that is 1 becomes 0. Each bit that is 0 becomes 1.

Return the larger of x and y

Return the smaller of x and y

Return the absolute value of  $x - y$

Calculate  $x / y$ , but round up the result.

Return the value of a base raised to a power

Get a nearest lower integer Square Root for x. Given that this function can only operate with integers, it is impossible to get perfect (or precise) integer square root for some numbers.

Example:

In integer math, one of the possible ways to get results with more precision is to use higher values or temporarily multiply the value by some bigger number. Ideally if this is a square of 10 or 100.

Example:

Try to convert a u64 to a u8 . Returns None if the value is too large.

Try to convert a [u64](#) to a [u16](#) . Returns None if the value is too large.

Try to convert a [u64](#) to a [u32](#) . Returns None if the value is too large.

Maximum value for a [u64](#)

Loops applying `ft o e a c h n u m b e r f r o m f t o e a c h n u m b e r f r o m s t a r t t o $stop` (exclusive)

Loops applying `ft o e a c h n u m b e r f r o m f t o e a c h n u m b e r f r o m s t a r t` to `$stop` (inclusive)

Loops applying ft o e a c h n u m b e r f r o m 0 t o f t o e a c h n u m b e r f r o m 0 t o s t o p ( e x c l u s i v e )

Loops applying ft oe a c h n u m b e r f r o m 0 t o f t oe a c h n u m b e r f r o m 0 t o s t o p (i n c l u s i v e)

## Function

Returns the bitwise not of the value. Each bit that is 1 becomes 0. Each bit that is 0 becomes 1.

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Return the larger of x and y

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Return the smaller of x and y

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Return the absolute value of  $x - y$

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Calculate  $x / y$ , but round up the result.

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Return the value of a base raised to a power

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```

Get a nearest lower integer Square Root for  $x$ . Given that this function can only operate with integers, it is impossible to get perfect (or precise) integer square root for some numbers.

Example:

In integer math, one of the possible ways to get results with more precision is to use higher values or temporarily multiply the value by some bigger number. Ideally if this is a square of 10 or 100.

Example:

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```

Try to convert a [u64](#) to a [u8](#) . Returns None if the value is too large.

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Try to convert a [u64](#) to a [u16](#) . Returns None if the value is too large.

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Try to convert a [u64](#) to a [u32](#) . Returns None if the value is too large.

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Maximum value for a [u64](#)

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Loops applying `ft oe a c h n u m b e r f r o m f` to each number from `ft oe a c h n u m b e r f r o m start` to `$stop` (exclusive)

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```

Loops applying `ft oe a c h n u m b e r f r o m f` to each number from `ft oe a c h n u m b e r f r o m start` to `$stop` (inclusive)

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Loops applying `ft oe a c h n u m b e r f r o m 0 t o f` to each number from `0` to `ft oe a c h n u m b e r f r o m 0 t o stop` (exclusive)

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Loops applying `ft oe a c h n u m b e r f r o m 0 t o f` to each number from `0` to `ft oe a c h n u m b e r f r o m 0 t o stop` (inclusive)

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## Function

Return the larger of x and y

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Return the smaller of x and y

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Return the absolute value of x - y

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```

Calculate x / y, but round up the result.

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Return the value of a base raised to a power

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```

Get a nearest lower integer Square Root for x. Given that this function can only operate with integers, it is impossible to get perfect (or precise) integer square root for some numbers.

Example:

In integer math, one of the possible ways to get results with more precision is to use higher values or temporarily multiply the value by some bigger number. Ideally if this is a square of 10 or 100.

Example:

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Try to convert a [u64](#) to a [u8](#) . Returns None if the value is too large.

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Try to convert a [u64](#) to a [u16](#) . Returns None if the value is too large.

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Try to convert a [u64](#) to a [u32](#) . Returns None if the value is too large.

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Maximum value for a [u64](#)

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Loops applying `ft oe a c h n u m b e r f r o m f t oe a c h n u m b e r f r o m start to $stop (exclusive)`

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Loops applying `for` to each number from `from` to each number from `from` to `to` (inclusive)

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Loops applying `for` to each number from `from` to `to` to each number from `from` to `to` (exclusive)

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Loops applying `for` to each number from `from` to `to` to each number from `from` to `to` (inclusive)

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## Function

Return the smaller of `x` and `y`

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Return the absolute value of `x - y`

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```

Calculate `x / y`, but round up the result.

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Return the value of a base raised to a power

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Get a nearest lower integer Square Root for x. Given that this function can only operate with integers, it is impossible to get perfect (or precise) integer square root for some numbers.

Example:

In integer math, one of the possible ways to get results with more precision is to use higher values or temporarily multiply the value by some bigger number. Ideally if this is a square of 10 or 100.

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```

Try to convert a [u64](#) to a [u8](#) . Returns None if the value is too large.

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Try to convert a [u64](#) to a [u16](#) . Returns None if the value is too large.

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Try to convert a [u64](#) to a [u32](#) . Returns None if the value is too large.

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Maximum value for a [u64](#)

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Loops applying `ftoeachnumberfromftoeachnumberfromstart to $stop (exclusive)`

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Loops applying `ftoeachnumberfromftoeachnumberfromstart to $stop (inclusive)`

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Loops applying `ftoeachnumberfrom0 to ftoeachnumberfrom0 toftoeachnumberfrom0 to stop (exclusive)`

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Loops applying `ftoeachnumberfrom0 to ftoeachnumberfrom0 toftoeachnumberfrom0 to stop (inclusive)`

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## Function

Return the absolute value of `x - y`

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Maximum value for a [u64](#)

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Maximum value for a [u64](#)

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Loops applying `ft oe a c h n u m b e r f r o m f` to each number from `ft oe a c h n u m b e r f r o m` start to `$stop` (exclusive)

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Loops applying ft o e a c h n u m b e r f r o m f to each number from ft o e a c h n u m b e r f r o m start to \$stop (inclusive)

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Loops applying ft o e a c h n u m b e r f r o m 0 t o f to each number from 0 to ft o e a c h n u m b e r f r o m 0 t o stop (exclusive)

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Loops applying ft o e a c h n u m b e r f r o m 0 t o f to each number from 0 to ft o e a c h n u m b e r f r o m 0 t o stop (inclusive)

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## Function

Return the value of a base raised to a power

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Get a nearest lower integer Square Root for x. Given that this function can only operate with integers, it is impossible to get perfect (or precise) integer square root for some numbers.

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Maximum value for a [u64](#)

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Loops applying ft oe a c h n u m b e r f r o m f to each number from ft oe a c h n u m b e r f r o m start to \$stop (exclusive)

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Loops applying ft oe a c h n u m b e r f r o m f to each number from ft oe a c h n u m b e r f r o m start to \$stop (inclusive)

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Loops applying ft o e a c h n u m b e r f r o m 0 t o f t o e a c h n u m b e r f r o m 0 t o s t o p (exclusive)

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Loops applying ft o e a c h n u m b e r f r o m 0 t o f t o e a c h n u m b e r f r o m 0 t o s t o p (inclusive)

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Try to convert a [u64](#) to a [u8](#) . Returns None if the value is too large.

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Loops applying ft oe a c h n u m b e r f r o m f to each number from ft oe a c h n u m b e r f r o m start to \$stop (exclusive)

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Loops applying ft oe a c h n u m b e r f r o m f to each number from ft oe a c h n u m b e r f r o m start to \$stop (inclusive)

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Loops applying ft oe a c h n u m b e r f r o m 0 t o f to each number from 0 to ft oe a c h n u m b e r f r o m 0 t o stop (exclusive)

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Loops applying ft oe a c h n u m b e r f r o m 0 t o f to each number from 0 to ft oe a c h n u m b e r f r o m 0 t o stop (inclusive)

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Try to convert a [u64](#) to a [u32](#) . Returns None if the value is too large.

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Maximum value for a [u64](#)

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Loops applying ft oe a c h n u m b e r f r o m f to each number from ft oe a c h n u m b e r f r o m start to \$stop (exclusive)

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Loops applying ft oe a c h n u m b e r f r o m f to each number from ft oe a c h n u m b e r f r o m start to \$stop (inclusive)

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Loops applying ft oe a c h n u m b e r f r o m 0 t o f to each number from 0 to ft oe a c h n u m b e r f r o m 0 t o stop (exclusive)



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Loops applying ft o e a c h n u m b e r f r o m 0 t o f t o e a c h n u m b e r f r o m 0 t o s t o p (inclusive)

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## Function

Try to convert a [u64](#) to a [u16](#) . Returns None if the value is too large.

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Maximum value for a [u64](#)

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Loops applying ft o e a c h n u m b e r f r o m f t o e a c h n u m b e r f r o m s t a r t t o \$stop (exclusive)

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Loops applying `ft oe a c h n u m b e r f r o m f` to each number from `ft oe a c h n u m b e r f r o m` start to `$stop` (inclusive)

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Loops applying `ft oe a c h n u m b e r f r o m 0 t o f` to each number from `0` to `ft oe a c h n u m b e r f r o m 0 t o` stop (exclusive)

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Loops applying `ft oe a c h n u m b e r f r o m 0 t o f` to each number from `0` to `ft oe a c h n u m b e r f r o m 0 t o` stop (inclusive)

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## Function

Try to convert a [u64](#) to a [u32](#) . Returns None if the value is too large.

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Maximum value for a [u64](#)

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Loops applying ft oe a c h n u m b e r f r o m 0 t o f to each number from 0 to ft oe a c h n u m b e r f r o m 0 t o stop (exclusive)

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```

Loops applying ft oe a c h n u m b e r f r o m 0 t o f to each number from 0 to ft oe a c h n u m b e r f r o m 0 t o stop (inclusive)

```
'''bash
```

```
'''
```

```
'''bash
```

```
'''
```

## Function

```
'''bash
```

```
'''
```

```
'''bash
```

```
'''
```

Maximum value for a [u64](#)

```
'''bash
```

```
'''
```

```
'''bash
```

```
'''
```

Loops applying ft oe a c h n u m b e r f r o m f to each number from ft oe a c h n u m b e r f r o m start to \$stop (exclusive)

```
'''bash
```

```
'''
```

```
'''bash
```

```
'''
```

Loops applying ft oe a c h n u m b e r f r o m f to each number from ft oe a c h n u m b e r f r o m start to \$stop (inclusive)

```
'''bash
```

```
'''
```

...

```
```bash
```

...

...

```
```bash
```

...

...

Maximum value for a [u64](#)

...

...

```
```bash
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```bash
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```bash
```

...

...

```
```bash
```

...

```
```bash
```

...

## Macro function

Loops applying `ft oe a c h n u m b e r f r o m f` to each number from `ft oe a c h n u m b e r f r o m` start to `$stop` (exclusive)

```
```bash
```

...

```
```bash
```

...

Loops applying `ft o e a c h n u m b e r f r o m` to each number from `ft o e a c h n u m b e r f r o m` start to `$stop` (inclusive)

```
```bash
```

...

```
```bash
```

...

Loops applying ft o e a c h n u m b e r f r o m 0 t o f t o e a c h n u m b e r f r o m 0 t o s t o p (e x c l u s i v e)

```
```bash
```

...

```
```bash
```

...

Loops applying ft o e a c h n u m b e r f r o m 0 t o f t o e a c h n u m b e r f r o m 0 t o s t o p (i n c l u s i v e)

```
```bash
```

...

```
```bash
```

...

## Macro function

Loops applying `ft o e a c h n u m b e r f r o m` to each number from `ft o e a c h n u m b e r f r o m` start to `$stop` (inclusive)

```
```bash
```

...

```
```bash
```

...

Loops applying ft o e a c h n u m b e r f r o m 0 t o f t o e a c h n u m b e r f r o m 0 t o s t o p ( e x c l u s i v e )

```
``bash
```

```
'''
```

```
'''bash
```

```
'''
```

Loops applying ft oe a c h n u m b e r f r o m 0 t o f to each number from 0 to ft oe a c h n u m b e r f r o m 0 t o stop (inclusive)

```
'''bash
```

```
'''
```

```
'''bash
```

```
'''
```

## Macro function

Loops applying ft oe a c h n u m b e r f r o m 0 t o f to each number from 0 to ft oe a c h n u m b e r f r o m 0 t o stop (exclusive)

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```
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```
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Loops applying ft oe a c h n u m b e r f r o m 0 t o f to each number from 0 to ft oe a c h n u m b e r f r o m 0 t o stop (inclusive)

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## Macro function

Loops applying ft oe a c h n u m b e r f r o m 0 t o f to each number from 0 to ft oe a c h n u m b e r f r o m 0 t o stop (inclusive)

```
'''bash
```

```
'''
```

```
'''bash
```

```
'''
```