# tensor.less\_equal

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Copy fnless\_equal(self:@Tensor, other:@Tensor)->Tensor;

Check if each element of the first tensor is less than or equal to the corresponding element of the second tensor. The input tensors must have either:

- Exactly the same shape
- The same number of dimensions and the length of each dimension is either a common length or 1.
- •

## Args

- self
- (@Tensor
- ) The first tensor to be compared
- other
- (@Tensor
- ) The second tensor to be compared
- .

#### **Panics**

- · Panics if the shapes are not equal or broadcastable

## Returns

A newTensor of booleans (0 or 1) with the same shape as the broadcasted inputs.

## Examples

```
Case 1: Compare tensors with same shape
```

Copy usecore::array::{ArrayTrait,SpanTrait};

```
useorion::operators::tensor::{TensorTrait,Tensor,U32Tensor};
```

 $\label{lem:condition} $$fnless_equal_example()->Tensor_1=Tensor_1=Tensor_1::::new(shape:array![3,3,3].span(), data:array![0,1,2,3,4,5,6,7,8].span(), );$ 

lettensor\_2=TensorTrait::::new( shape:array![3,3,3].span(), data:array![0,1,2,3,4,5,9,1,5].span(), );

// We can call less\_equal function as follows. returntensor\_1.less\_equal(@tensor\_2); }

```
[1,1,1,1,1,1,1,0,0]
```

Case 2: Compare tensors with different shapes

Copy usecore::array::{ArrayTrait,SpanTrait};

useorion::operators::tensor::{TensorTrait,Tensor,U32Tensor};

 $fnless\_equal\_example()->Tensor \{ lettensor\_1=TensorTrait::::new( shape:array![3,3,3].span(), data:array![0,1,2,3,4,5,6,7,8].span(), ); \\$ 

lettensor\_2=TensorTrait::::new(shape:array![3].span(), data:array![0,1,2].span(),);

```
// We can call less_equal function as follows. returntensor_1.less_equal(@tensor_2); }  [1,1,1,0,0,0,1,1,1]  ...
```

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Last updated3 months ago