## tensor.greater

# tensor.greater

Copy fngreater(self:@Tensor, other:@Tensor)->Tensor;

Check if each element of the first tensor is greater than 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};
fngreater_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![3,3,3].span(), data:array![0,1,2,3,4,5,9,1,5].span(), );
// We can call greater function as follows. returntensor_1.greater(@tensor_2); }
                 [0,0,0,0,0,0,0,1,1]
Case 2: Compare tensors with different shapes
```

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

```
useorion::operators::tensor::{TensorTrait,Tensor,U32Tensor};
fngreater_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 greater function as follows. returntensor\_1.greater(@tensor\_2); } [0,0,0,1,1,1,1,1,1] ...

Previous tensor.equal Next tensor.greater\_equal

Last updated3 months ago