

# tensor.binarizer

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Copy `fnbinarizer(self:@Tensor, threshold:Option)->Tensor`

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Maps the values of a tensor element-wise to 0 or 1 based on the comparison against a threshold value.

## Args

- `self`
- `(@Tensor`
- `)` - The input tensor to be binarized.
- `threshold`
- `(Option`
- `)` - The threshold for the binarization operation.
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## Returns

A new `Tensor` of the same shape as the input tensor with binarized values.

## Type Constraints

Constrain input and output types to fixed point numbers.

## Examples

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

`useorion::operators::tensor::{TensorTrait,Tensor,FP8x23Tensor}; useorion::numbers::{FixedTrait,FP8x23};`

`fnbinarizer_example()->Tensor { lettensor=TensorTrait::new( shape:array![2,2].span(), data:array![ FixedTrait::new(0,false),  
FixedTrait::new(1,false), FixedTrait::new(2,false), FixedTrait::new(3,false) ] .span(), );  
letthreshold=Option::Some(FixedTrait::new(1,false))`

`returntensor.binarizer(@tensor, threshold); }`

`[0,0,8388608,8388608] // The fixed point representation of [0,0,1,1]`

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Last updated3 months ago