

# tensor.onehot

...

```
Copy fnonehot(self:@Tensor, depth:usize, axis:Option, values:Span)->Tensor;
```

...

Produces one-hot tensor based on input.

## Args

- self
- (@Tensor
- ) - The input tensor.
- depth
- (usize
- ) - Scalar or Rank 1 tensor containing exactly one element, specifying the number of classes in one-hot tensor.
- axis
- (Option
- ) - Axis along which one-hot representation in added. Default: axis=-1.
- values
- (Span
- ) - Rank 1 tensor containing exactly two elements, in the format [off\_value, on\_value]
- 

## Panics

- Panics if values is not equal to 2.
- 

## Returns

A newTensor one-hot encode of the input tensor.

## Type Constraints

Constrain input and output types to fixed point tensors.

## Example

...

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

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

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

```
returntensor.onehot(depth:3, axis:Option::None(()), values:array![0,1].span()); }
```

```
[[1.0.0.] [0.1.0.] [0.0.1.]]
```

...

[Previous tensor.xor](#) [Next tensor.slice](#)

Last updated3 months ago