

# tensor.argmax

```
...  
  
Copy fnargmax(self:@Tensor, axis:usize, keepdims:Option, select_last_index:Option)->Tensor;  
...
```

Returns the index of the maximum value along the specified axis.

## Args

- self
- (@Tensor
- ) - The input tensor.
- axis
- (usize
- ) - The axis along which to compute the argmax.
- keepdims
- (Option
- ) - If true, retains reduced dimensions with length 1. Defaults to true.
- select\_last\_index
- (Option
- ) - If true, the index of the last occurrence of the maximum value is returned. Defaults to false.
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## Panics

- Panics if axis is not in the range of the input tensor's dimensions.
- 

## Returns

A newTensor instance containing the indices of the maximum values along the specified axis.

## Examples

Case 1: argmax with default parameters

```
...  
  
Copy usecore::array::{ArrayTrait,SpanTrait};  
useorion::operators::tensor::{TensorTrait,Tensor,U32Tensor};  
  
fnargmax_example()->Tensor { lettensor=TensorTrait::new( shape:array![2,2,2].span(), data:array![0,1,2,3,4,4,5,5].span(),  
)  
;  
  
// We can call argmax function as follows. returntensor.argmax(axis:2, keepdims:Option::None()),  
select_last_index:Option::None()); }  
  
[[[1,1],[0,0]]]  
...
```

Case 2: argmax with keepdims set to false

```
...  
  
Copy usecore::array::{ArrayTrait,SpanTrait};  
useorion::operators::tensor::{TensorTrait,Tensor,U32Tensor};  
  
fnargmax_example()->Tensor { lettensor=TensorTrait::new( shape:array![2,2,2].span(), data:array![0,1,2,3,4,4,5,5].span(),  
)  
;  
  
// We can call argmax function as follows. returntensor .argmax(axis:2, keepdims:Option::Some(false),  
select_last_index:Option::None()); }  
  
[[1,1],[0,0]]
```

...

Case 3: argmax with select\_last\_index set to true

...

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

```
use orion::operators::tensor::{TensorTrait,Tensor,U32Tensor};
```

```
fn argmax_example()->Tensor { let tensor=TensorTrait::new( shape:array![2,2,2].span(), data:array![0,1,2,3,4,4,5,5].span(), );
```

```
// We can call argmax function as follows. return tensor.argmax(axis:2, keepdims:Option::None()), select_last_index:Option::Some(true)); }
```

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

...

[Previous tensor.reduce\\_sum](#) [Next tensor.argmin](#)

Last updated 3 months ago