tensor.reduce_log_sum_exp

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```

Copy fnreduce_log_sum_exp(self:@Tensor, axis:usize, keepdims:bool)->Tensor;

```

Computes the log sum of the exponentials of the input tensor's elements along the provided axes.

Args

- 'self'(@Tensor
-) - The input tensor.
- 'axis'(usize
-) - The dimension to reduce.
- 'keepdims'(bool
-) - If true, retains reduced dimensions with length 1.
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Panics

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

Returns

Returns a newTensor instance with the specified axis reduced by summing its elements.

Example

```

Copy usecore::array::{ArrayTrait,SpanTrait}; useorion::operators::tensor::{TensorTrait,Tensor};
useorion::operators::tensor::FP32x32Tensor; useorion::numbers::{FixedTrait,FP32x32};

fnreduce_log_sum_exp()->Tensor { letmutshape=ArrayTrait::::new(); shape.append(3); shape.append(2); shape.append(2);

letmutdata=ArrayTrait::new(); data.append(FP32x32{ mag:4294967296, sign:false}); data.append(FP32x32{
mag:8589934592, sign:false}); data.append(FP32x32{ mag:12884901888, sign:false}); data.append(FP32x32{
mag:17179869184, sign:false}); data.append(FP32x32{ mag:21474836480, sign:false}); data.append(FP32x32{
mag:25769803776, sign:false}); data.append(FP32x32{ mag:30064771072, sign:false}); data.append(FP32x32{
mag:34359738368, sign:false}); data.append(FP32x32{ mag:38654705664, sign:false}); data.append(FP32x32{
mag:42949672960, sign:false}); data.append(FP32x32{ mag:47244640256, sign:false}); data.append(FP32x32{
mag:51539607552, sign:false}); TensorTrait::new(shape.span(), data.span())

lettensor=TensorTrait::::new(shape.span(), data.span());

returntensor.reduce_log_sum_exp(axis:2, keepdims:false);

}

                [[9215828,16323477,20115004], [22716772,24699744,26302432]]

```

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Last updated15 days ago