

tf.contrib.seq2seq.safe_cumprod

```
safe_cumprod(  
    x,  
    *args,  
    **kwargs  
)
```

Defined in [tensorflow/contrib/seq2seq/python/ops/attention_wrapper.py](#).

Computes cumprod of x in logspace using cumsum to avoid underflow.

The cumprod function and its gradient can result in numerical instabilities when its argument has very small and/or zero values. As long as the argument is all positive, we can instead compute the cumulative product as $\exp(\text{cumsum}(\log(x)))$. This function can be called identically to `tf.cumprod`.

Args:

- `x`: Tensor to take the cumulative product of.
- `*args`: Passed on to `cumsum`; these are identical to those in `cumprod`.
- `**kwargs`: Passed on to `cumsum`; these are identical to those in `cumprod`.

Returns:

Cumulative product of x.

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