

tf.nn.log_softmax

```
log_softmax(  
    logits,  
    dim=-1,  
    name=None  
)
```

Defined in [tensorflow/python/ops/nn_ops.py](#).

See the guide: [Neural Network > Classification](#)

Computes log softmax activations.

For each batch **i** and class **j** we have

```
logsoftmax = logits - log(reduce_sum(exp(logits), dim))
```

Args:

- **logits**: A non-empty **Tensor**. Must be one of the following types: **half**, **float32**, **float64**.
- **dim**: The dimension softmax would be performed on. The default is -1 which indicates the last dimension.
- **name**: A name for the operation (optional).

Returns:

A **Tensor**. Has the same type as **logits**. Same shape as **logits**.

Raises:

- **InvalidArgumentError**: if **logits** is empty or **dim** is beyond the last dimension of **logits**.

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