

tf.reduce_all

```
reduce_all(  
    input_tensor,  
    axis=None,  
    keep_dims=False,  
    name=None,  
    reduction_indices=None  
)
```

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

See the guide: [Math > Reduction](#)

Computes the "logical and" of elements across dimensions of a tensor.

Reduces `input_tensor` along the dimensions given in `axis`. Unless `keep_dims` is true, the rank of the tensor is reduced by 1 for each entry in `axis`. If `keep_dims` is true, the reduced dimensions are retained with length 1.

If `axis` has no entries, all dimensions are reduced, and a tensor with a single element is returned.

For example:

```
x = tf.constant([[True,  True], [False, False]])  
tf.reduce_all(x) # False  
tf.reduce_all(x, 0) # [False, False]  
tf.reduce_all(x, 1) # [True, False]
```

Args:

- `input_tensor`: The boolean tensor to reduce.
- `axis`: The dimensions to reduce. If `None` (the default), reduces all dimensions. Must be in the range `[-rank(input_tensor), rank(input_tensor))`.
- `keep_dims`: If true, retains reduced dimensions with length 1.
- `name`: A name for the operation (optional).
- `reduction_indices`: The old (deprecated) name for axis.

Returns:

The reduced tensor.

numpy compatibility

Equivalent to `np.all`

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