

## tf.reduce\_mean

```
reduce_mean(  
    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 mean 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([[1., 1.], [2., 2.]])  
tf.reduce_mean(x) # 1.5  
tf.reduce_mean(x, 0) # [1.5, 1.5]  
tf.reduce_mean(x, 1) # [1., 2.]
```

### Args:

- `input_tensor`: The tensor to reduce. Should have numeric type.
- `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.mean`

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