

## tf.nn.l2\_loss

```
l2_loss(  
    t,  
    name=None  
)
```

Defined in `tensorflow/python/ops/gen_nn_ops.py`.

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

L2 Loss.

Computes half the L2 norm of a tensor without the `sqrt`:

```
output = sum(t ** 2) / 2
```

## Args:

- `t`: A **Tensor**. Must be one of the following types: `half`, `float32`, `float64`. Typically 2-D, but may have any dimensions.
- `name`: A name for the operation (optional).

## Returns:

A **Tensor**. Has the same type as `t`. 0-D.

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