

## tf.clip\_by\_value

```
clip_by_value(  
    t,  
    clip_value_min,  
    clip_value_max,  
    name=None  
)
```

Defined in [tensorflow/python/ops/clip\\_ops.py](#).

See the guide: [Training > Gradient Clipping](#)

Clips tensor values to a specified min and max.

Given a tensor `t`, this operation returns a tensor of the same type and shape as `t` with its values clipped to `clip_value_min` and `clip_value_max`. Any values less than `clip_value_min` are set to `clip_value_min`. Any values greater than `clip_value_max` are set to `clip_value_max`.

### Args:

- `t`: A `Tensor`.
- `clip_value_min`: A 0-D (scalar) `Tensor`, or a `Tensor` with the same shape as `t`. The minimum value to clip by.
- `clip_value_max`: A 0-D (scalar) `Tensor`, or a `Tensor` with the same shape as `t`. The maximum value to clip by.
- `name`: A name for the operation (optional).

### Returns:

A clipped `Tensor`.

### Raises:

- `ValueError`: if the clip tensors would trigger array broadcasting that would make the returned tensor larger than the input.

---

Except as otherwise noted, the content of this page is licensed under the [Creative Commons Attribution 3.0 License](#), and code samples are licensed under the [Apache 2.0 License](#). For details, see our [Site Policies](#). Java is a registered trademark of Oracle and/or its affiliates.

Last updated November 2, 2017.

### Stay Connected

[Blog](#)

[GitHub](#)

[Twitter](#)

Support

[Issue Tracker](#)

[Release Notes](#)

[Stack Overflow](#)

English

[Terms](#) | [Privacy](#)