

ReLU

CLASS `torch.nn.ReLU(inplace=False)` [\[SOURCE\]](#)

Applies the rectified linear unit function element-wise.

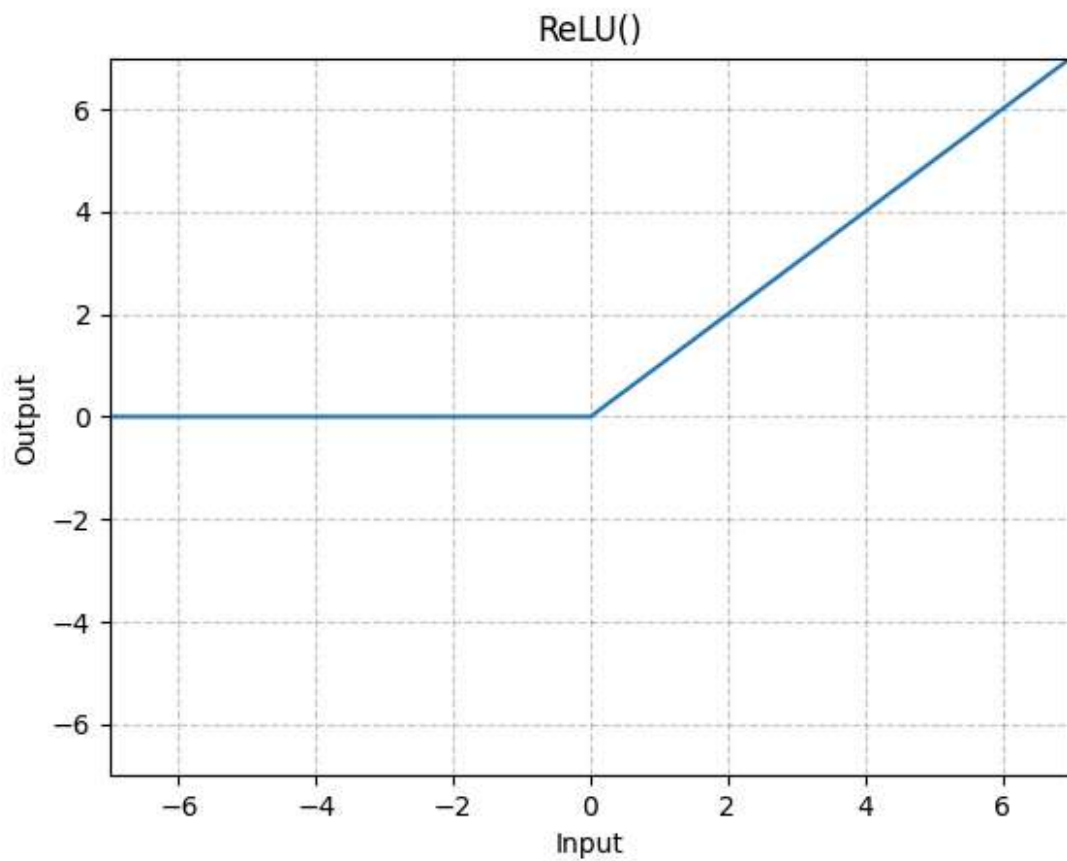
$$\text{ReLU}(x) = (x)^+ = \max(0, x)$$

Parameters

`inplace` (`bool`) – can optionally do the operation in-place. Default: `False`

Shape:

- Input: $(*)$, where $*$ means any number of dimensions.
- Output: $(*)$, same shape as the input.



Examples:

```
>>> m = nn.ReLU()
>>> input = torch.randn(2)
>>> output = m(input)
```

An implementation of CReLU - <https://arxiv.org/abs/1603.05201>

```
>>> m = nn.ReLU()
>>> input = torch.randn(2).unsqueeze(0)
>>> output = torch.cat((m(input), m(-input)))
```

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