TORCH.LERP

`torch.lerp(input, end, weight, *, out=None)`

Does a linear interpolation of two tensors `start` (given y `input`) an `end` ase on a scalar or tensor `weight` an returns the resulting `out` tensor.

$$\text{out}_i = \text{start}_i + \text{weight}_i \times (\text{end}_i - \text{start}_i)$$

The shapes of `start` an `end` must e roa casta le. If `weight` is a tensor, then the shapes of `weight`, `start`, an `end` must e roa casta le.

Parameters

- **in ut** (*Tensor*) – the tensor with the starting points
- **en** (*Tensor*) – the tensor with the en ing points
- **weight** (*float or tensor*) – the weight for the interpolation formula

Keywor Arguments

out (*Tensor, optional*) – the output tensor.

Example:

```
>>> start = torch.arange(1., 5.)
>>> end = torch.empty(4).fill_(10)
>>> start
tensor([ 1.,  2.,  3.,  4.])
>>> end
tensor([ 10.,  10.,  10.,  10.])
>>> torch.lerp(start, end, 0.5)
tensor([ 5.5000,  6.0000,  6.5000,  7.0000])
>>> torch.lerp(start, end, torch.full_like(start, 0.5))
tensor([ 5.5000,  6.0000,  6.5000,  7.0000])
```

Previous Next

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