

```
1 from .layers import *
2
3 def affine_relu_forward(x, w, b):
4     """
5     Convenience layer that performs an affine transform followed by a ReLU
6
7     Inputs:
8     - x: Input to the affine layer
9     - w, b: Weights for the affine layer
10
11     Returns a tuple of:
12     - out: Output from the ReLU
13     - cache: Object to give to the backward pass
14     """
15     a, fc_cache = affine_forward(x, w, b)
16     out, relu_cache = relu_forward(a)
17     cache = (fc_cache, relu_cache)
18     return out, cache
19
20
21 def affine_relu_backward(dout, cache):
22     """
23     Backward pass for the affine-relu convenience layer
24     """
25     fc_cache, relu_cache = cache
26     da = relu_backward(dout, relu_cache)
27     dx, dw, db = affine_backward(da, fc_cache)
28     return dx, dw, db
```