

# FLATTEN

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CLASS `torch.nn.Flatten(start_dim=1,  
end_dim=- 1)` [\[SOURCE\]](#)

Flattens a contiguous range of dims into a tensor. For use with Sequential.

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Shape:

- Input:  $(*, S_{\text{start}}, \dots, S_i, \dots, S_{\text{end}}, *)$ , where  $S_i$  is the size at dimension  $i$  and  $*$  means any number of dimensions including none.
  - Output:  $(*, \prod_{i=\text{start}}^{\text{end}} S_i, *)$ .
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Parameters:

- **start\_dim** (*int*) – first dim to flatten (default = 1).
- **end\_dim** (*int*) – last dim to flatten (default = -1).

## Examples::



```
>>> input = torch.randn(32,  
1, 5, 5)  
>>> # With default parameters  
>>> m = nn.Flatten()  
>>> output = m(input)  
>>> output.size()  
torch.Size([32, 25])  
>>> # With non-default  
parameters  
>>> m = nn.Flatten(0, 2)  
>>> output = m(input)  
>>> output.size()  
torch.Size([160, 5])
```