

1. [Example Input/Output Pair](#)

Example Input/Output Pair

Display input/output pairs from random executions:

Code from [ReferenceIO.java:86](#) executed in 7.60 seconds (0.345 gc):

```
@Nonnull final SimpleEval eval = SimpleEval.run(layer, inputPrototype);
Tensor evalOutput = eval.getOutput();
String format = String.format("-----\nInput:  \n[%s]\n-----\n\n"
    Arrays.stream(inputPrototype).map(t -> t.prettyPrint()).reduce((a, b) -> a + ",\n",\n
    Arrays.toString(evalOutput.getDimensions()),\n
    evalOutput.prettyPrint(),\n
    Arrays.stream(eval.getDerivative()).map(t -> t.prettyPrint()).reduce((a, b) -> a + ",\n",\n
    eval.freeRef());
return format;
```

Returns:

```
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Input:
[[
    [ [ 1.26, -0.932, 1.036 ], [ 1.5, -1.664, -1.972 ], [ -0.584, 1.452, 1.408 ],
    [ [ -0.124, 1.128, 1.304 ], [ -1.368, 0.856, 0.996 ], [ 1.288, -1.132, -0.16
    [ [ -0.572, 1.14, 0.82 ], [ 0.268, 1.688, -1.688 ], [ -1.448, -1.668, 0.628 ]
    [ [ -1.696, 1.612, -1.304 ], [ -1.524, -1.18, -0.112 ], [ 0.064, 1.448, -0.8
    [ [ 0.736, 0.152, -0.4 ], [ -0.436, -0.524, 0.564 ], [ -0.952, 1.56, 0.2 ],
    [ [ 0.244, -0.052, -1.284 ], [ 0.324, -0.308, 0.552 ], [ 0.64, -1.68, -1.292
    [ [ -1.048, 1.892, -0.516 ], [ 0.432, -1.276, 1.388 ], [ -0.888, 1.672, 0.52
    [ [ -0.892, -0.396, -0.004 ], [ -1.324, -1.512, -1.532 ], [ -0.56, 1.564, -0.
    ...
]]
-----
Output:
[1, 1, 1]
[
    [ [ 29.521227575446126 ] ]
]
-----
Derivative:
[
    [ [ 4.2814754124265164E-5, -1.106288909795694E-4, -1.3809319170832168E-5 ],
    [ [ 5.117255568620749E-5, -8.507524762535468E-5, -1.7715636204229668E-5 ],
    [ [ 7.340974207181716E-6, -1.4912190636096057E-5, -1.1521981832629535E-5 ],
    [ [ -4.3838190322276205E-5, 3.22968335240148E-5, -6.534658496093471E-6 ],
    [ [ -4.9779129767557606E-5, 6.519533599202987E-6, 1.9849976524710655E-5 ],
    [ [ -7.068923878250644E-6, -1.1814571735158097E-5, 5.415323357738089E-6 ],
    [ [ 3.707433643285185E-5, -2.254613718832843E-5, -3.150093471049331E-5 ],
    [ [ 4.2365340050309896E-5, -1.9185443306923844E-5, -1.1805126632680185E-5 ],
    ...
]
```