

1. [Batch Execution](#)

Batch Execution

Most layers, including this one, should behave the same no matter how the items are split between batches. We verify this:

Code from [BatchingTester.java:174](#) executed in 0.60 seconds (0.382 gc):

```
return test(reference, inputPrototype);
```

Logging:

Error executing network component

```
java.lang.RuntimeException: java.lang.AssertionError
    at com.simiacyptus.mindseye.lang.cudnn.CudnnHandle.lambda$wrap$3(CudnnHandle.java:116)
    at com.simiacyptus.mindseye.lang.cudnn.CudaSystem.lambda$run$19(CudaSystem.java:1115)
    at com.simiacyptus.lang.ResourcePool.apply(ResourcePool.java:144)
    at com.simiacyptus.lang.ResourcePool.apply(ResourcePool.java:116)
    at com.simiacyptus.mindseye.lang.cudnn.CudaSystem.run(CudaSystem.java:1115)
    at com.simiacyptus.mindseye.layers.cudnn.SumInputsLayer.lambda$evalAndFree$1(SumInputsLayer.java:123)
    at java.util.stream.ReduceOps$2ReducingSink.accept(ReduceOps.java:123)
    at java.util.stream.ReduceOps$2ReducingSink.combine(ReduceOps.java:135)
    at java.util.stream.ReduceOps$2ReducingSink.combine(ReduceOps.java:107)
    at java.util.stream.ReduceOps$ReduceTask.onCompletion(ReduceOps.java:754)
    at java.util.concurrent.CountedCompleter.tryComplete(CountedCompleter.java:57)
    at java.util.stream.AbstractTask.compute(AbstractTask.java:317)
    at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
    at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
    at java.util.concurrent.ForkJoinPool.helpComplete(ForkJoinPool.java:1870)
    at java.util.concurrent.ForkJoinPool.externalHelpComplete(ForkJoinPool.java:1870)
    at java.util.concurrent.ForkJoinTask.externalAwaitDone(ForkJoinTask.java:324)
    at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:405)
    at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
    at java.util.stream.ReduceOps$ReduceOp.evaluateParallel(ReduceOps.java:714)
    at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:233)
    at java.util.stream.ReferencePipeline.reduce(ReferencePipeline.java:479)
    at com.simiacyptus.mindseye.layers.cudnn.SumInputsLayer.evalAndFree(SumInputsLayer.java:123)
    at com.simiacyptus.mindseye.network.InnerNode.eval(InnerNode.java:101)
    at com.simiacyptus.mindseye.network.LazyResult.get(LazyResult.java:93)
    at com.simiacyptus.mindseye.network.InnerNode.get(InnerNode.java:37)
    at com.simiacyptus.mindseye.network.LazyResult.get(LazyResult.java:37)
    at com.simiacyptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:101)
    at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
    at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:914)
    at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
    at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:47)
    at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
    at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
    at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
    at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
    at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
    at java.util.stream.Nodes.collect(Nodes.java:325)
    at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:101)
    at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
    at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.java:540)
    at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
    at com.simiacyptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
    at com.simiacyptus.mindseye.network.LazyResult.get(LazyResult.java:93)
    at com.simiacyptus.mindseye.network.InnerNode.get(InnerNode.java:37)
    at com.simiacyptus.mindseye.network.LazyResult.get(LazyResult.java:37)
    at com.simiacyptus.mindseye.network.DAGNetwork.eval(DAGNetwork.java:319)
    at com.simiacyptus.mindseye.lang.Layer.evalAndFree(Layer.java:232)
    at com.simiacyptus.mindseye.network.InnerNode.eval(InnerNode.java:101)
```

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at com.simiacyptus.mindseye.network.LazyResult.get(LazyResult.java:93)
at com.simiacyptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacyptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacyptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:93)
at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:905)
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:474)
at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.Nodes.collect(Nodes.java:325)
at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:167)
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.java:544)
at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
at com.simiacyptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
at com.simiacyptus.mindseye.network.LazyResult.get(LazyResult.java:93)
at com.simiacyptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacyptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacyptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:93)
at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:905)
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:474)
at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.Nodes.collect(Nodes.java:325)
at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:167)
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.java:544)
at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
at com.simiacyptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
at com.simiacyptus.mindseye.network.LazyResult.get(LazyResult.java:93)
at com.simiacyptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacyptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacyptus.mindseye.network.DAGNetwork.eval(DAGNetwork.java:319)
at com.simiacyptus.mindseye.test.SimpleListEval.call(SimpleListEval.java:133)
at com.simiacyptus.mindseye.test.SimpleListEval.run(SimpleListEval.java:98)
at com.simiacyptus.mindseye.test.unit.BatchingTester.test(BatchingTester.java:100)
at com.simiacyptus.mindseye.test.unit.BatchingTester.lambda$test$20(BatchingTester.java:100)
at com.simiacyptus.notebook.MarkdownNotebookOutput.lambda$eval$18(MarkdownNotebookOutput.java:100)
at com.simiacyptus.util.test.SysOutInterceptor.withOutput(SysOutInterceptor.java:100)
at com.simiacyptus.notebook.MarkdownNotebookOutput.eval(MarkdownNotebookOutput.java:100)
at com.simiacyptus.notebook.NotebookOutput.eval(NotebookOutput.java:74)
at com.simiacyptus.mindseye.test.unit.BatchingTester.test(BatchingTester.java:100)
at com.simiacyptus.mindseye.test.unit.BatchingTester.test(BatchingTester.java:100)
at com.simiacyptus.mindseye.test.unit.StandardLayerTests.lambda$null$15(StandardLayerTests.java:100)
at com.simiacyptus.notebook.MarkdownNotebookOutput.subreport(MarkdownNotebookOutput.java:100)
at com.simiacyptus.mindseye.test.unit.StandardLayerTests.lambda$bigTests$16(StandardLayerTests.java:100)
at java.util.stream.ForEachOps$ForEachOp$OfRef.accept(ForEachOps.java:184)
at java.util.stream.ReferencePipeline$2$1.accept(ReferencePipeline.java:175)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:905)
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:474)
at java.util.stream.ForEachOps$ForEachOp.evaluateSequential(ForEachOps.java:151)
at java.util.stream.ForEachOps$ForEachOp$OfRef.evaluateSequential(ForEachOps.java:168)
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:234)
at java.util.stream.ReferencePipeline.forEach(ReferencePipeline.java:418)
at com.simiacyptus.mindseye.test.unit.StandardLayerTests.bigTests(StandardLayerTests.java:100)
at com.simiacyptus.mindseye.test.unit.StandardLayerTests.standardTests(StandardLayerTests.java:100)
at com.simiacyptus.mindseye.test.unit.StandardLayerTests.run(StandardLayerTests.java:100)
at com.simiacyptus.notebook.MarkdownNotebookOutput.lambda$null$6(MarkdownNotebookOutput.java:100)
```

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at com.simiacryptus.lang.TimedResult.time(TimedResult.java:91)
at com.simiacryptus.notebook.MarkdownNotebookOutput.lambda$wrapFrontmatter$7(
at com.simiacryptus.notebook.NotebookOutput.lambda$concat$0(NotebookOutput.ja
at com.simiacryptus.mindseye.test.NotebookReportBase.run(NotebookReportBase.:
at com.simiacryptus.mindseye.layers.java.LayerTestBase.test(LayerTestBase.jav
at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorIm
at java.lang.reflect.Method.invoke(Method.java:498)
at org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMetho
at org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable
at org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod
at org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.:
at org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call
at org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call
at java.util.concurrent.FutureTask.run(FutureTask.java:266)
at java.lang.Thread.run(Thread.java:748)
Caused by: java.lang.AssertionError: null
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.addAndFree(CudnnHandle.ja
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.lambda$null$1(SumInp
at com.simiacryptus.mindseye.lang.cudnn.CudaSystem.lambda$null$18(CudaSystem
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.lambda$null$2(CudnnHandle
at java.util.concurrent.FutureTask.run(FutureTask.java:266)
at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:
at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:
... 1 common frames omitted
Error executing network component
java.lang.RuntimeException: java.lang.RuntimeException: java.lang.AssertionError
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:106)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:9
at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:4
at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.Nodes.collect(Nodes.java:325)
at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:1
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.jav
at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.DAGNetwork.eval(DAGNetwork.java:319)
at com.simiacryptus.mindseye.lang.Layer.evalAndFree(Layer.java:232)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:101)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:9
at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:4
at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.Nodes.collect(Nodes.java:325)
at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:1

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at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinPool.helpComplete(ForkJoinPool.java:1870)
at java.util.concurrent.ForkJoinPool.externalHelpComplete(ForkJoinPool.java:2
at java.util.concurrent.ForkJoinTask.externalAwaitDone(ForkJoinTask.java:324)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:405)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.ReduceOps$ReduceOp.evaluateParallel(ReduceOps.java:714)
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:233)
at java.util.stream.ReferencePipeline.reduce(ReferencePipeline.java:479)
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.evalAndFree(SumInput
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:101)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
... 109 common frames omitted
Caused by: java.lang.AssertionError: null
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.addAndFree(CudnnHandle.ja
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.lambda$null$1(SumInq
at com.simiacryptus.mindseye.lang.cudnn.CudaSystem.lambda$null$18(CudaSystem.
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.lambda$null$2(CudnnHandle
at java.util.concurrent.FutureTask.run(FutureTask.java:266)
at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:
at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:
... 1 common frames omitted
Error executing network component
java.lang.RuntimeException: java.lang.RuntimeException: :
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:106)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:9
at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:4
at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.Nodes.collect(Nodes.java:325)
at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:1
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.jav
at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.DAGNetwork.eval(DAGNetwork.java:319)
at com.simiacryptus.mindseye.test.SimpleListEval.call(SimpleListEval.java:13
at com.simiacryptus.mindseye.test.SimpleListEval.run(SimpleListEval.java:98)
at com.simiacryptus.mindseye.test.unit.BatchingTester.test(BatchingTester.jav
at com.simiacryptus.mindseye.test.unit.BatchingTester.lambda$test$20(Batchin
at com.simiacryptus.notebook.MarkdownNotebookOutput.lambda$eval$18(MarkdownNc
at com.simiacryptus.util.test.SysOutInterceptor.withOutput(SysOutIntercepto
at com.simiacryptus.notebook.MarkdownNotebookOutput.eval(MarkdownNotebookOut
at com.simiacryptus.notebook.NotebookOutput.eval(NotebookOutput.java:74)
at com.simiacryptus.mindseye.test.unit.BatchingTester.test(BatchingTester.jav
at com.simiacryptus.mindseye.test.unit.BatchingTester.test(BatchingTester.jav
at com.simiacryptus.mindseye.test.unit.StandardLayerTests.lambda$null$15(Star
at com.simiacryptus.notebook.MarkdownNotebookOutput.subreport(MarkdownNoteboc
at com.simiacryptus.mindseye.test.unit.StandardLayerTests.lambda$bigTests$16
at java.util.stream.ForEachOps$ForEachOp$OfRef.accept(ForEachOps.java:184)
at java.util.stream.ReferencePipeline$2$1.accept(ReferencePipeline.java:175)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:4
at java.util.stream.ForEachOps$ForEachOp.evaluateSequential(ForEachOps.java:1
at java.util.stream.ForEachOps$ForEachOp$OfRef.evaluateSequential(ForEachOps.
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:234)
```

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at java.util.stream.ReferencePipeline.forEach(ReferencePipeline.java:418)
at com.simiacryptus.mindseye.test.unit.StandardLayerTests.bigTests(StandardLa
at com.simiacryptus.mindseye.test.unit.StandardLayerTests.standardTests(Stanc
at com.simiacryptus.mindseye.test.unit.StandardLayerTests.run(StandardLayerTe
at com.simiacryptus.notebook.MarkdownNotebookOutput.lambda$null$6(MarkdownNot
at com.simiacryptus.lang.TimedResult.time(TimedResult.java:91)
at com.simiacryptus.notebook.MarkdownNotebookOutput.lambda$wrapFrontmatter$7(
at com.simiacryptus.notebook.NotebookOutput.lambda$concat$0(NotebookOutput.ja
at com.simiacryptus.mindseye.test.NotebookReportBase.run(NotebookReportBase.
at com.simiacryptus.mindseye.layers.java.LayerTestBase.test(LayerTestBase.jav
at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorIr
at java.lang.reflect.Method.invoke(Method.java:498)
at org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMetho
at org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable
at org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod.
at org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.
at org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call
at org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call
at java.util.concurrent.FutureTask.run(FutureTask.java:266)
at java.lang.Thread.run(Thread.java:748)
Caused by: java.lang.RuntimeException: java.lang.RuntimeException: java.lang.RuntimeException:
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:106)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:9
at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:4
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at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.Nodes.collect(Nodes.java:325)
at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:1
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.jav
at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
... 65 common frames omitted
Caused by: java.lang.RuntimeException: java.lang.RuntimeException: java.lang.AssertionError:
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:106)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:9
at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:4
at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.Nodes.collect(Nodes.java:325)
at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:1
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.jav
at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.DAGNetwork.eval(DAGNetwork.java:319)

```

```

at com.simiacryptus.mindseye.lang.Layer.evalAndFree(Layer.java:232)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:101)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
... 84 common frames omitted
Caused by: java.lang.RuntimeException: java.lang.AssertionError
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.lambda$wrap$3(CudnnHandle.java:101)
at com.simiacryptus.mindseye.lang.cudnn.CudaSystem.lambda$run$19(CudaSystem.java:101)
at com.simiacryptus.lang.ResourcePool.apply(ResourcePool.java:144)
at com.simiacryptus.lang.ResourcePool.apply(ResourcePool.java:116)
at com.simiacryptus.mindseye.lang.cudnn.CudaSystem.run(CudaSystem.java:1115)
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.lambda$evalAndFree$2(SumInputsLayer.java:101)
at java.util.stream.ReduceOps$2ReducingSink.accept(ReduceOps.java:123)
at java.util.stream.ReduceOps$2ReducingSink.combine(ReduceOps.java:135)
at java.util.stream.ReduceOps$2ReducingSink.combine(ReduceOps.java:107)
at java.util.stream.ReduceOps$ReduceTask.onCompletion(ReduceOps.java:754)
at java.util.concurrent.CountedCompleter.tryComplete(CountedCompleter.java:574)
at java.util.stream.AbstractTask.compute(AbstractTask.java:317)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinPool.helpComplete(ForkJoinPool.java:1870)
at java.util.concurrent.ForkJoinPool.externalHelpComplete(ForkJoinPool.java:2043)
at java.util.concurrent.ForkJoinTask.externalAwaitDone(ForkJoinTask.java:324)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:405)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.ReduceOps$ReduceOp.evaluateParallel(ReduceOps.java:714)
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:233)
at java.util.stream.ReferencePipeline.reduce(ReferencePipeline.java:479)
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.evalAndFree(SumInputsLayer.java:101)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:101)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
... 109 common frames omitted
Caused by: java.lang.AssertionError: null
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.addAndFree(CudnnHandle.java:101)
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.lambda$null$1(SumInputsLayer.java:101)
at com.simiacryptus.mindseye.lang.cudnn.CudaSystem.lambda$null$18(CudaSystem.java:101)
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.lambda$null$2(CudnnHandle.java:101)
at java.util.concurrent.FutureTask.run(FutureTask.java:266)
at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1145)
at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:645)
... 1 common frames omitted

```

Returns:

```
java.lang.RuntimeException: java.lang.RuntimeException: java.lang.RuntimeException: :
    at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:106)
    at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
    at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
    at com.simiacryptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:99)
    at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
    at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:905)
    at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
    at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:472)
    at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
    at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
    at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
    at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
    at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
    at java.util.stream.Nodes.collect(Nodes.java:325)
    at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:118)
    at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
    at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.java:530)
    at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
    at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
    at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
    at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
    at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
    at com.simiacryptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:99)
```



```

at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:47
at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.Nodes.collect(Nodes.java:325)
at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:1
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.jav
at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.DAGNetwork.eval(DAGNetwork.java:319)
at com.simiacryptus.mindseye.test.SimpleListEval.call(SimpleListEval.java:13
at com.simiacryptus.mindseye.test.SimpleListEval.run(SimpleListEval.java:98)
at com.simiacryptus.mindseye.test.unit.BatchingTester.test(BatchingTester.jav
at com.simiacryptus.mindseye.test.unit.BatchingTester.lambda$test$20(Batching
at com.simiacryptus.notebook.MarkdownNotebookOutput.lambda$eval$18(MarkdownNe
at com.simiacryptus.util.test.SysOutInterceptor.withOutput(SysOutInterceptor
at com.simiacryptus.notebook.MarkdownNotebookOutput.eval(MarkdownNotebookOutp
at com.simiacryptus.notebook.NotebookOutput.eval(NotebookOutput.java:74)
at com.simiacryptus.mindseye.test.unit.BatchingTester.test(BatchingTester.jav
at com.simiacryptus.mindseye.test.unit.BatchingTester.test(BatchingTester.jav
at com.simiacryptus.mindseye.test.unit.StandardLayerTests.lambda$null$15(Star
at com.simiacryptus.notebook.MarkdownNotebookOutput.subreport(MarkdownNotebo
at com.simiacryptus.mindseye.test.unit.StandardLayerTests.lambda$bigTests$16
at java.util.stream.ForEachOps$ForEachOp$OfRef.accept(ForEachOps.java:184)
at java.util.stream.ReferencePipeline$2$1.accept(ReferencePipeline.java:175)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:47
at java.util.stream.ForEachOps$ForEachOp.evaluateSequential(ForEachOps.java:1
at java.util.stream.ForEachOps$ForEachOp$OfRef.evaluateSequential(ForEachOps
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:234)
at java.util.stream.ReferencePipeline.forEach(ReferencePipeline.java:418)
at com.simiacryptus.mindseye.test.unit.StandardLayerTests.bigTests(StandardLa
at com.simiacryptus.mindseye.test.unit.StandardLayerTests.standardTests(Stanc
at com.simiacryptus.mindseye.test.unit.StandardLayerTests.run(StandardLayerTe
at com.simiacryptus.notebook.MarkdownNotebookOutput.lambda$null$6(MarkdownNot
at com.simiacryptus.lang.TimedResult.time(TimedResult.java:91)
at com.simiacryptus.notebook.MarkdownNotebookOutput.lambda$wrapFrontmatter$7
at com.simiacryptus.notebook.NotebookOutput.lambda$concat$0(NotebookOutput.ja
at com.simiacryptus.mindseye.test.NotebookReportBase.run(NotebookReportBase.
at com.simiacryptus.mindseye.layers.java.LayerTestBase.test(LayerTestBase.jav
at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorI
at java.lang.reflect.Method.invoke(Method.java:498)
at org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMetho
at org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable
at org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod
at org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.
at org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call
at org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call
at java.util.concurrent.FutureTask.run(FutureTask.java:266)
at java.lang.Thread.run(Thread.java:748)
Caused by: java.lang.RuntimeException: java.lang.RuntimeException: java.lang.Assertio
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:106)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:9
at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)

```



```

at java.util.Spliterators$ArraySplitter.forEachRemaining(Spliterators.java:
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:4
at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.Nodes.collect(Nodes.java:325)
at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.jav
at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.DAGNetwork.eval(DAGNetwork.java:319)
at com.simiacryptus.mindseye.lang.Layer.evalAndFree(Layer.java:232)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:101)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
... 84 more
Caused by: java.lang.RuntimeException: java.lang.AssertionError
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.lambda$wrap$3(CudnnHandle
at com.simiacryptus.mindseye.lang.cudnn.CudaSystem.lambda$run$19(CudaSystem.
at com.simiacryptus.lang.ResourcePool.apply(ResourcePool.java:144)
at com.simiacryptus.lang.ResourcePool.apply(ResourcePool.java:116)
at com.simiacryptus.mindseye.lang.cudnn.CudaSystem.run(CudaSystem.java:1115)
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.lambda$evalAndFree$
at java.util.stream.ReduceOps$2ReducingSink.accept(ReduceOps.java:123)
at java.util.stream.ReduceOps$2ReducingSink.combine(ReduceOps.java:135)
at java.util.stream.ReduceOps$2ReducingSink.combine(ReduceOps.java:107)
at java.util.stream.ReduceOps$ReduceTask.onCompletion(ReduceOps.java:754)
at java.util.concurrent.CountedCompleter.tryComplete(CountedCompleter.java:5
at java.util.stream.AbstractTask.compute(AbstractTask.java:317)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinPool.helpComplete(ForkJoinPool.java:1870)
at java.util.concurrent.ForkJoinPool.externalHelpComplete(ForkJoinPool.java:
at java.util.concurrent.ForkJoinTask.externalAwaitDone(ForkJoinTask.java:324
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:405)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.ReduceOps$ReduceOp.evaluateParallel(ReduceOps.java:714)
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:233)
at java.util.stream.ReferencePipeline.reduce(ReferencePipeline.java:479)
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.evalAndFree(SumInput
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:101)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
... 109 more
Caused by: java.lang.AssertionError
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.addAndFree(CudnnHandle.j
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.lambda$null$1(SumIn
at com.simiacryptus.mindseye.lang.cudnn.CudaSystem.lambda$null$18(CudaSystem
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.lambda$null$2(CudnnHandle
at java.util.concurrent.FutureTask.run(FutureTask.java:266)
at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:
at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.jav
... 1 more

```

Code from [MarkdownNotebookOutput.java:832](#) executed in 0.00 seconds (0.000 gc):

```
throw e;
```

Returns:

```
java.lang.RuntimeException: java.lang.RuntimeException: java.lang.RuntimeException: :
    at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:106)
    at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
    at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
    at com.simiacryptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:99)
    at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
    at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:905)
    at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
    at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:474)
    at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
    at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
    at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
    at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
    at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
    at java.util.stream.Nodes.collect(Nodes.java:325)
    at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:119)
    at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
    at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.java:533)
    at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
    at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
    at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
    at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
    at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
    at com.simiacryptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:99)
    at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
    at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:905)
    at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
    at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:474)
    at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
    at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
    at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
    at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
    at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
    at java.util.stream.Nodes.collect(Nodes.java:325)
    at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:119)
    at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
    at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.java:533)
    at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
    at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
    at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
    at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
    at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
    at com.simiacryptus.mindseye.network.DAGNetwork.eval(DAGNetwork.java:319)
    at com.simiacryptus.mindseye.test.SimpleListEval.call(SimpleListEval.java:137)
    at com.simiacryptus.mindseye.test.SimpleListEval.run(SimpleListEval.java:98)
    at com.simiacryptus.mindseye.test.unit.BatchingTester.test(BatchingTester.java:100)
    at com.simiacryptus.mindseye.test.unit.BatchingTester.lambda$test$20(BatchingTester.java:100)
    at com.simiacryptus.notebook.MarkdownNotebookOutput.lambda$eval$18(MarkdownNotebookOutput.java:100)
    at com.simiacryptus.util.test.SysOutInterceptor.withOutput(SysOutInterceptor.java:100)
    at com.simiacryptus.notebook.MarkdownNotebookOutput.eval(MarkdownNotebookOutput.java:100)
    at com.simiacryptus.notebook.NotebookOutput.eval(NotebookOutput.java:74)
    at com.simiacryptus.mindseye.test.unit.BatchingTester.test(BatchingTester.java:100)
    at com.simiacryptus.mindseye.test.unit.BatchingTester.test(BatchingTester.java:100)
    at com.simiacryptus.mindseye.test.unit.StandardLayerTests.lambda$null$15(StandardLayerTests.java:100)
    at com.simiacryptus.notebook.MarkdownNotebookOutput.subreport(MarkdownNotebookOutput.java:100)
    at com.simiacryptus.mindseye.test.unit.StandardLayerTests.lambda$bigTests$16(StandardLayerTests.java:100)
    at java.util.stream.ForEachOps$ForEachOp$OfRef.accept(ForEachOps.java:184)
    at java.util.stream.ReferencePipeline$2$1.accept(ReferencePipeline.java:175)
    at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:905)
    at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
    at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:474)
    at java.util.stream.ForEachOps$ForEachOp.evaluateSequential(ForEachOps.java:151)
    at java.util.stream.ForEachOps$ForEachOp$OfRef.evaluateSequential(ForEachOps.java:173)
    at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:234)
    at java.util.stream.ReferencePipeline.forEach(ReferencePipeline.java:418)
    at com.simiacryptus.mindseye.test.unit.StandardLayerTests.bigTests(StandardLayerTests.java:100)
    at com.simiacryptus.mindseye.test.unit.StandardLayerTests.standardTests(StandardLayerTests.java:100)
```

```
at com.simiacryptus.mindseye.test.unit.StandardLayerTests.run(StandardLayerTe
at com.simiacryptus.notebook.MarkdownNotebookOutput.lambda$null$6(MarkdownNot
at com.simiacryptus.lang.TimedResult.time(TimedResult.java:91)
at com.simiacryptus.notebook.MarkdownNotebookOutput.lambda$wrapFrontmatter$7(
at com.simiacryptus.notebook.NotebookOutput.lambda$concat$0(NotebookOutput.ja
at com.simiacryptus.mindseye.test.NotebookReportBase.run(NotebookReportBase.:
at com.simiacryptus.mindseye.layers.java.LayerTestBase.test(LayerTestBase.jav
at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorIm
at java.lang.reflect.Method.invoke(Method.java:498)
at org.junit.runners.model.FrameworkMethod$1.runReflectiveCall(FrameworkMetho
at org.junit.internal.runners.model.ReflectiveCallable.run(ReflectiveCallable
at org.junit.runners.model.FrameworkMethod.invokeExplosively(FrameworkMethod
at org.junit.internal.runners.statements.InvokeMethod.evaluate(InvokeMethod.:
at org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call
at org.junit.internal.runners.statements.FailOnTimeout$CallableStatement.call
at java.util.concurrent.FutureTask.run(FutureTask.java:266)
at java.lang.Thread.run(Thread.java:748)
Caused by: java.lang.RuntimeException: java.lang.RuntimeException: java.lang.Assertio
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:106)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.InnerNode.lambda$eval$2(InnerNode.java:9
at java.util.stream.ReferencePipeline$3$1.accept(ReferencePipeline.java:193)
at java.util.Spliterators$ArraySpliterator.forEachRemaining(Spliterators.java:
at java.util.stream.AbstractPipeline.copyInto(AbstractPipeline.java:481)
at java.util.stream.AbstractPipeline.wrapAndCopyInto(AbstractPipeline.java:4
at java.util.stream.Nodes$SizedCollectorTask.compute(Nodes.java:1878)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:401)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.Nodes.collect(Nodes.java:325)
at java.util.stream.ReferencePipeline.evaluateToNode(ReferencePipeline.java:1
at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:540)
at java.util.stream.AbstractPipeline.evaluateToArrayNode(AbstractPipeline.jav
at java.util.stream.ReferencePipeline.toArray(ReferencePipeline.java:438)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:99)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
at com.simiacryptus.mindseye.network.InnerNode.get(InnerNode.java:37)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:37)
at com.simiacryptus.mindseye.network.DAGNetwork.eval(DAGNetwork.java:319)
at com.simiacryptus.mindseye.lang.Layer.evalAndFree(Layer.java:232)
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:101)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
... 84 more
Caused by: java.lang.RuntimeException: java.lang.AssertionError
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.lambda$wrap$3(CudnnHandle
at com.simiacryptus.mindseye.lang.cudnn.CudaSystem.lambda$run$19(CudaSystem.:
at com.simiacryptus.lang.ResourcePool.apply(ResourcePool.java:144)
at com.simiacryptus.lang.ResourcePool.apply(ResourcePool.java:116)
at com.simiacryptus.mindseye.lang.cudnn.CudaSystem.run(CudaSystem.java:1115)
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.lambda$evalAndFree$
at java.util.stream.ReduceOps$2ReducingSink.accept(ReduceOps.java:123)
at java.util.stream.ReduceOps$2ReducingSink.combine(ReduceOps.java:135)
at java.util.stream.ReduceOps$2ReducingSink.combine(ReduceOps.java:107)
at java.util.stream.ReduceOps$ReduceTask.onCompletion(ReduceOps.java:754)
at java.util.concurrent.CountedCompleter.tryComplete(CountedCompleter.java:5
at java.util.stream.AbstractTask.compute(AbstractTask.java:317)
at java.util.concurrent.CountedCompleter.exec(CountedCompleter.java:731)
at java.util.concurrent.ForkJoinTask.doExec(ForkJoinTask.java:289)
at java.util.concurrent.ForkJoinPool.helpComplete(ForkJoinPool.java:1870)
at java.util.concurrent.ForkJoinPool.externalHelpComplete(ForkJoinPool.java:
at java.util.concurrent.ForkJoinTask.externalAwaitDone(ForkJoinTask.java:324
at java.util.concurrent.ForkJoinTask.doInvoke(ForkJoinTask.java:405)
at java.util.concurrent.ForkJoinTask.invoke(ForkJoinTask.java:734)
at java.util.stream.ReduceOps$ReduceOp.evaluateParallel(ReduceOps.java:714)
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at java.util.stream.AbstractPipeline.evaluate(AbstractPipeline.java:233)
at java.util.stream.ReferencePipeline.reduce(ReferencePipeline.java:479)
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.evalAndFree(SumInput
at com.simiacryptus.mindseye.network.InnerNode.eval(InnerNode.java:101)
at com.simiacryptus.mindseye.network.LazyResult.get(LazyResult.java:93)
... 109 more
Caused by: java.lang.AssertionError
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.addAndFree(CudnnHandle.ja
at com.simiacryptus.mindseye.layers.cudnn.SumInputsLayer.lambda$null$1(SumIn
at com.simiacryptus.mindseye.lang.cudnn.CudaSystem.lambda$null$18(CudaSystem
at com.simiacryptus.mindseye.lang.cudnn.CudnnHandle.lambda$null$2(CudnnHandle
at java.util.concurrent.FutureTask.run(FutureTask.java:266)
at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:
at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:
... 1 more
```