

Test Results Summary

Successful Test Cases

batch_size	in_channels	out_channels	kernel_size	stride	padding	output_sum_diff	nnz_cpp_result	nnz_torch_eval	nnz_difference
10	1	16	1	1	0	2.514570951461792e-08	2768	2768	False
10	1	16	1	1	1	4.936009645462036e-08	2048	2048	False
10	1	16	2	1	0	1.1548399925231934e-07	9280	9280	False
10	1	16	2	1	1	-1.4528632164001465e-07	8496	8496	False
10	1	16	3	1	0	3.4458935260772705e-08	18064	18064	False
10	1	16	3	1	1	1.8998980522155762e-07	18400	18400	False
10	1	32	1	1	0	-1.210719347000122e-08	4224	4224	False
10	1	32	1	1	1	-6.658956408500671e-08	3712	3712	False
10	1	32	2	1	0	-3.91155481338501e-08	16896	16896	False
10	1	32	2	1	1	-1.1175870895385742e-08	18560	18560	False
10	1	32	3	1	0	-2.8312206268310547e-07	35936	35936	False
10	1	32	3	1	1	1.1548399925231934e-07	36608	36608	False
10	32	16	1	1	0	-1.7881393432617188e-07	63152	63152	False
10	32	16	1	1	1	-3.725290298461914e-08	62864	62864	False
10	32	16	2	1	0	-2.2351741790771484e-07	173344	173344	False
10	32	16	2	1	1	-1.3783574104309082e-06	183440	183440	False
10	32	16	3	1	0	-2.384185791015625e-07	228432	228432	False
10	32	16	3	1	1	-5.066394805908203e-07	248928	248928	False
10	32	32	1	1	0	-2.8312206268310547e-07	127360	127360	False
10	32	32	1	1	1	2.5331974029541016e-07	128352	128352	False
10	32	32	2	1	0	1.8998980522155762e-07	349184	349184	False
10	32	32	2	1	1	-2.2351741790771484e-07	368672	368672	False
10	32	32	3	1	0	1.4901161193847656e-06	463968	463968	False
10	32	32	3	1	1	-2.9802322387695312e-08	501120	501120	False
100	1	16	1	1	0	1.825392246246338e-07	23376	23376	False
100	1	16	1	1	1	2.384185791015625e-07	22288	22288	False
100	1	16	2	1	0	-1.9371509552001953e-07	82272	82272	False
100	1	16	2	1	1	-2.421438694000244e-07	84672	84672	False
100	1	16	3	1	0	6.109476089477539e-07	183120	183120	False

100	1	16	3	1	1	-7.003545761108398e-07	195968	195968	False
100	1	32	1	1	0	-2.905726432800293e-07	45696	45696	False
100	1	32	1	1	1	-2.0489096641540527e-07	43712	43712	False
100	1	32	2	1	0	1.3783574104309082e-07	170464	170464	False
100	1	32	2	1	1	2.849847078323364e-07	181152	181152	False
100	1	32	3	1	0	5.960464477539063e-08	373792	373792	False
100	1	32	3	1	1	2.0489096641540527e-07	394368	394368	False
100	32	16	1	1	0	8.642673492431641e-07	638944	638944	False
100	32	16	1	1	1	-8.642673492431641e-07	640928	640928	False
100	32	16	2	1	0	-1.1175870895385742e-06	1728736	1728736	False
100	32	16	2	1	1	-8.344650268554688e-07	1842928	1842928	False
100	32	16	3	1	0	-8.344650268554688e-07	2307776	2307776	False
100	32	16	3	1	1	-9.5367431640625e-07	2510432	2510432	False
100	32	32	1	1	0	2.682209014892578e-07	1274688	1274688	False
100	32	32	1	1	1	-4.470348358154297e-07	1278944	1278944	False
100	32	32	2	1	0	1.9073486328125e-06	3449056	3449056	False
100	32	32	2	1	1	-3.5762786865234375e-06	3660768	3660768	False
100	32	32	3	1	0	2.7418136596679688e-06	4624672	4624672	False
100	32	32	3	1	1	5.960464477539063e-08	5025056	5025056	False

Failed Test Cases

batch_size	in_channels	out_channels	kernel_size	stride	padding	output_sum_diff	nnz_cpp_result	nnz_torch_eval	nnz_difference
10	1	16	1	2	0	0.7021881341934204	2288	592	True
10	1	16	1	2	1	0.3651781380176544	2080	576	True
10	1	16	2	2	0	-0.16128063201904297	4448	2256	True
10	1	16	2	2	1	-0.43152719736099243	4560	2112	True
10	1	16	3	2	0	-0.0566292479634285	7920	4704	True
10	1	16	3	2	1	-0.03418858349323273	8016	4624	True
10	1	32	1	2	0	-0.4320717453956604	4832	1280	True
10	1	32	1	2	1	-0.039839208126068115	4992	1120	True
10	1	32	2	2	0	0.2541143298149109	8960	4000	True
10	1	32	2	2	1	-0.2641303539276123	10816	4448	True
10	1	32	3	2	0	1.2162957191467285	16096	9056	True
10	1	32	3	2	1	-1.880796194076538	15648	9120	True

10	32	16	1	2	0	-1.2803881168365479	45120	15360	True
10	32	16	1	2	1	2.339843273162842	46096	15888	True
10	32	16	2	2	0	1.0378429889678955	62432	44960	True
10	32	16	2	2	1	1.9784281253814697	67136	47088	True
10	32	16	3	2	0	6.565918922424316	63152	58160	True
10	32	16	3	2	1	-3.780818462371826	68928	62704	True
10	32	32	1	2	0	0.3182179927825928	92000	33344	True
10	32	32	1	2	1	0.19564288854599	94528	33696	True
10	32	32	2	2	0	0.3838813900947571	124992	90912	True
10	32	32	2	2	1	-1.2023870944976807	131744	92224	True
10	32	32	3	2	0	-9.272660255432129	125728	116160	True
10	32	32	3	2	1	1.2748466730117798	138496	126944	True
100	1	16	1	2	0	1.0466907024383545	23072	5600	True
100	1	16	1	2	1	0.3881438970565796	21600	5216	True
100	1	16	2	2	0	-0.2093294858932495	46816	21760	True
100	1	16	2	2	1	0.04558283090591431	48176	22032	True
100	1	16	3	2	0	-2.0818822383880615	76208	42928	True
100	1	16	3	2	1	2.1086368560791016	79904	45632	True
100	1	32	1	2	0	-0.0341452956199646	45152	11424	True
100	1	32	1	2	1	0.023951224982738495	45472	10944	True
100	1	32	2	2	0	-1.3496034145355225	93728	43648	True
100	1	32	2	2	1	0.23838159441947937	101440	44832	True
100	1	32	3	2	0	0.40606188774108887	157440	91712	True
100	1	32	3	2	1	3.738457441329956	164032	95520	True
100	32	16	1	2	0	0.742663562297821	451200	156432	True
100	32	16	1	2	1	3.6661295890808105	462928	158752	True
100	32	16	2	2	0	-9.900106430053711	627104	452976	True
100	32	16	2	2	1	2.614128589630127	662992	463456	True
100	32	16	3	2	0	7.988638877868652	629168	576224	True
100	32	16	3	2	1	-14.21040153503418	689280	623568	True
100	32	32	1	2	0	-6.783827304840088	902944	319648	True
100	32	32	1	2	1	3.0733816623687744	928576	317952	True
100	32	32	2	2	0	0.18418478965759277	1253536	903776	True
100	32	32	2	2	1	-3.140298843383789	1324192	925376	True
100	32	32	3	2	0	14.377982139587402	1259424	1155936	True

100	32	32	3	2	1	-21.573287963867188	1377760	1254304	True
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Difference Detected:

Batch Size: 10
Input Channels: 1
Output Channels: 16
Kernel Size: 1
Stride: 2
Padding: 0
Output Sum Difference: 0.7021881341934204
nnz Cpp Result: 2288
nnz Torch Eval: 592

Difference Detected:

Batch Size: 10
Input Channels: 1
Output Channels: 16
Kernel Size: 1
Stride: 2
Padding: 1
Output Sum Difference: 0.3651781380176544
nnz Cpp Result: 2080
nnz Torch Eval: 576

Difference Detected:

Batch Size: 10
Input Channels: 1
Output Channels: 16
Kernel Size: 2
Stride: 2
Padding: 0
Output Sum Difference: -0.16128063201904297
nnz Cpp Result: 4448
nnz Torch Eval: 2256

Difference Detected:

Batch Size: 10
Input Channels: 1
Output Channels: 16
Kernel Size: 2
Stride: 2
Padding: 1
Output Sum Difference: -0.43152719736099243
nnz Cpp Result: 4560
nnz Torch Eval: 2112

Difference Detected:

Batch Size: 10
Input Channels: 1

Output Channels: 16
Kernel Size: 3
Stride: 2
Padding: 0
Output Sum Difference: -0.0566292479634285
nnz Cpp Result: 7920
nnz Torch Eval: 4704

Difference Detected:

Batch Size: 10
Input Channels: 1
Output Channels: 16
Kernel Size: 3
Stride: 2
Padding: 1
Output Sum Difference: -0.03418858349323273
nnz Cpp Result: 8016
nnz Torch Eval: 4624

Difference Detected:

Batch Size: 10
Input Channels: 1
Output Channels: 32
Kernel Size: 1
Stride: 2
Padding: 0
Output Sum Difference: -0.4320717453956604
nnz Cpp Result: 4832
nnz Torch Eval: 1280

Difference Detected:

Batch Size: 10
Input Channels: 1
Output Channels: 32
Kernel Size: 1
Stride: 2
Padding: 1
Output Sum Difference: -0.039839208126068115
nnz Cpp Result: 4992
nnz Torch Eval: 1120

Difference Detected:

Batch Size: 10
Input Channels: 1
Output Channels: 32
Kernel Size: 2
Stride: 2
Padding: 0

Output Sum Difference: 0.2541143298149109
nnz Cpp Result: 8960
nnz Torch Eval: 4000

Difference Detected:

Batch Size: 10
Input Channels: 1
Output Channels: 32
Kernel Size: 2
Stride: 2
Padding: 1
Output Sum Difference: -0.2641303539276123
nnz Cpp Result: 10816
nnz Torch Eval: 4448

Difference Detected:

Batch Size: 10
Input Channels: 1
Output Channels: 32
Kernel Size: 3
Stride: 2
Padding: 0
Output Sum Difference: 1.2162957191467285
nnz Cpp Result: 16096
nnz Torch Eval: 9056

Difference Detected:

Batch Size: 10
Input Channels: 1
Output Channels: 32
Kernel Size: 3
Stride: 2
Padding: 1
Output Sum Difference: -1.880796194076538
nnz Cpp Result: 15648
nnz Torch Eval: 9120

Difference Detected:

Batch Size: 10
Input Channels: 32
Output Channels: 16
Kernel Size: 1
Stride: 2
Padding: 0
Output Sum Difference: -1.2803881168365479
nnz Cpp Result: 45120
nnz Torch Eval: 15360

Difference Detected:

Batch Size: 10
Input Channels: 32
Output Channels: 16
Kernel Size: 1
Stride: 2
Padding: 1
Output Sum Difference: 2.339843273162842
nnz Cpp Result: 46096
nnz Torch Eval: 15888

Difference Detected:

Batch Size: 10
Input Channels: 32
Output Channels: 16
Kernel Size: 2
Stride: 2
Padding: 0
Output Sum Difference: 1.0378429889678955
nnz Cpp Result: 62432
nnz Torch Eval: 44960

Difference Detected:

Batch Size: 10
Input Channels: 32
Output Channels: 16
Kernel Size: 2
Stride: 2
Padding: 1
Output Sum Difference: 1.9784281253814697
nnz Cpp Result: 67136
nnz Torch Eval: 47088

Difference Detected:

Batch Size: 10
Input Channels: 32
Output Channels: 16
Kernel Size: 3
Stride: 2
Padding: 0
Output Sum Difference: 6.565918922424316
nnz Cpp Result: 63152
nnz Torch Eval: 58160

Difference Detected:

Batch Size: 10
Input Channels: 32

Output Channels: 16
Kernel Size: 3
Stride: 2
Padding: 1
Output Sum Difference: -3.780818462371826
nnz Cpp Result: 68928
nnz Torch Eval: 62704

Difference Detected:

Batch Size: 10
Input Channels: 32
Output Channels: 32
Kernel Size: 1
Stride: 2
Padding: 0
Output Sum Difference: 0.3182179927825928
nnz Cpp Result: 92000
nnz Torch Eval: 33344

Difference Detected:

Batch Size: 10
Input Channels: 32
Output Channels: 32
Kernel Size: 1
Stride: 2
Padding: 1
Output Sum Difference: 0.19564288854599
nnz Cpp Result: 94528
nnz Torch Eval: 33696

Difference Detected:

Batch Size: 10
Input Channels: 32
Output Channels: 32
Kernel Size: 2
Stride: 2
Padding: 0
Output Sum Difference: 0.3838813900947571
nnz Cpp Result: 124992
nnz Torch Eval: 90912

Difference Detected:

Batch Size: 10
Input Channels: 32
Output Channels: 32
Kernel Size: 2
Stride: 2
Padding: 1

Output Sum Difference: -1.2023870944976807
nnz Cpp Result: 131744
nnz Torch Eval: 92224

Difference Detected:

Batch Size: 10
Input Channels: 32
Output Channels: 32
Kernel Size: 3
Stride: 2
Padding: 0
Output Sum Difference: -9.272660255432129
nnz Cpp Result: 125728
nnz Torch Eval: 116160

Difference Detected:

Batch Size: 10
Input Channels: 32
Output Channels: 32
Kernel Size: 3
Stride: 2
Padding: 1
Output Sum Difference: 1.2748466730117798
nnz Cpp Result: 138496
nnz Torch Eval: 126944

Difference Detected:

Batch Size: 100
Input Channels: 1
Output Channels: 16
Kernel Size: 1
Stride: 2
Padding: 0
Output Sum Difference: 1.0466907024383545
nnz Cpp Result: 23072
nnz Torch Eval: 5600

Difference Detected:

Batch Size: 100
Input Channels: 1
Output Channels: 16
Kernel Size: 1
Stride: 2
Padding: 1
Output Sum Difference: 0.3881438970565796
nnz Cpp Result: 21600
nnz Torch Eval: 5216

Difference Detected:

Batch Size: 100
Input Channels: 1
Output Channels: 16
Kernel Size: 2
Stride: 2
Padding: 0
Output Sum Difference: -0.2093294858932495
nnz Cpp Result: 46816
nnz Torch Eval: 21760

Difference Detected:

Batch Size: 100
Input Channels: 1
Output Channels: 16
Kernel Size: 2
Stride: 2
Padding: 1
Output Sum Difference: 0.04558283090591431
nnz Cpp Result: 48176
nnz Torch Eval: 22032

Difference Detected:

Batch Size: 100
Input Channels: 1
Output Channels: 16
Kernel Size: 3
Stride: 2
Padding: 0
Output Sum Difference: -2.0818822383880615
nnz Cpp Result: 76208
nnz Torch Eval: 42928

Difference Detected:

Batch Size: 100
Input Channels: 1
Output Channels: 16
Kernel Size: 3
Stride: 2
Padding: 1
Output Sum Difference: 2.1086368560791016
nnz Cpp Result: 79904
nnz Torch Eval: 45632

Difference Detected:

Batch Size: 100
Input Channels: 1

Output Channels: 32
Kernel Size: 1
Stride: 2
Padding: 0
Output Sum Difference: -0.0341452956199646
nnz Cpp Result: 45152
nnz Torch Eval: 11424

Difference Detected:

Batch Size: 100
Input Channels: 1
Output Channels: 32
Kernel Size: 1
Stride: 2
Padding: 1
Output Sum Difference: 0.023951224982738495
nnz Cpp Result: 45472
nnz Torch Eval: 10944

Difference Detected:

Batch Size: 100
Input Channels: 1
Output Channels: 32
Kernel Size: 2
Stride: 2
Padding: 0
Output Sum Difference: -1.3496034145355225
nnz Cpp Result: 93728
nnz Torch Eval: 43648

Difference Detected:

Batch Size: 100
Input Channels: 1
Output Channels: 32
Kernel Size: 2
Stride: 2
Padding: 1
Output Sum Difference: 0.23838159441947937
nnz Cpp Result: 101440
nnz Torch Eval: 44832

Difference Detected:

Batch Size: 100
Input Channels: 1
Output Channels: 32
Kernel Size: 3
Stride: 2
Padding: 0

Output Sum Difference: 0.40606188774108887
nnz Cpp Result: 157440
nnz Torch Eval: 91712

Difference Detected:

Batch Size: 100
Input Channels: 1
Output Channels: 32
Kernel Size: 3
Stride: 2
Padding: 1
Output Sum Difference: 3.738457441329956
nnz Cpp Result: 164032
nnz Torch Eval: 95520

Difference Detected:

Batch Size: 100
Input Channels: 32
Output Channels: 16
Kernel Size: 1
Stride: 2
Padding: 0
Output Sum Difference: 0.742663562297821
nnz Cpp Result: 451200
nnz Torch Eval: 156432

Difference Detected:

Batch Size: 100
Input Channels: 32
Output Channels: 16
Kernel Size: 1
Stride: 2
Padding: 1
Output Sum Difference: 3.6661295890808105
nnz Cpp Result: 462928
nnz Torch Eval: 158752

Difference Detected:

Batch Size: 100
Input Channels: 32
Output Channels: 16
Kernel Size: 2
Stride: 2
Padding: 0
Output Sum Difference: -9.900106430053711
nnz Cpp Result: 627104
nnz Torch Eval: 452976

Difference Detected:

Batch Size: 100
Input Channels: 32
Output Channels: 16
Kernel Size: 2
Stride: 2
Padding: 1
Output Sum Difference: 2.614128589630127
nnz Cpp Result: 662992
nnz Torch Eval: 463456

Difference Detected:

Batch Size: 100
Input Channels: 32
Output Channels: 16
Kernel Size: 3
Stride: 2
Padding: 0
Output Sum Difference: 7.988638877868652
nnz Cpp Result: 629168
nnz Torch Eval: 576224

Difference Detected:

Batch Size: 100
Input Channels: 32
Output Channels: 16
Kernel Size: 3
Stride: 2
Padding: 1
Output Sum Difference: -14.21040153503418
nnz Cpp Result: 689280
nnz Torch Eval: 623568

Difference Detected:

Batch Size: 100
Input Channels: 32
Output Channels: 32
Kernel Size: 1
Stride: 2
Padding: 0
Output Sum Difference: -6.783827304840088
nnz Cpp Result: 902944
nnz Torch Eval: 319648

Difference Detected:

Batch Size: 100
Input Channels: 32

Output Channels: 32
Kernel Size: 1
Stride: 2
Padding: 1
Output Sum Difference: 3.0733816623687744
nnz Cpp Result: 928576
nnz Torch Eval: 317952

Difference Detected:

Batch Size: 100
Input Channels: 32
Output Channels: 32
Kernel Size: 2
Stride: 2
Padding: 0
Output Sum Difference: 0.18418478965759277
nnz Cpp Result: 1253536
nnz Torch Eval: 903776

Difference Detected:

Batch Size: 100
Input Channels: 32
Output Channels: 32
Kernel Size: 2
Stride: 2
Padding: 1
Output Sum Difference: -3.140298843383789
nnz Cpp Result: 1324192
nnz Torch Eval: 925376

Difference Detected:

Batch Size: 100
Input Channels: 32
Output Channels: 32
Kernel Size: 3
Stride: 2
Padding: 0
Output Sum Difference: 14.377982139587402
nnz Cpp Result: 1259424
nnz Torch Eval: 1155936

Difference Detected:

Batch Size: 100
Input Channels: 32
Output Channels: 32
Kernel Size: 3
Stride: 2
Padding: 1

Output Sum Difference: -21.573287963867188
nnz Cpp Result: 1377760
nnz Torch Eval: 1254304