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learning\_rate: 0.1, dropout: 0.1, batch\_size: 32  
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epoch	1		200/ 2104 batches		lr 0.100		ms/batch 8.21		loss 0.69	
epoch	1		400/ 2104 batches		lr 0.100		ms/batch 7.05		loss 0.69	
epoch	1		600/ 2104 batches		lr 0.100		ms/batch 7.08		loss 0.69	
epoch	1		800/ 2104 batches		lr 0.100		ms/batch 7.07		loss 0.69	
epoch	1		1000/ 2104 batches		lr 0.100		ms/batch 7.11		loss 0.68	
epoch	1		1200/ 2104 batches		lr 0.100		ms/batch 7.05		loss 0.68	
epoch	1		1400/ 2104 batches		lr 0.100		ms/batch 6.98		loss 0.69	
epoch	1		1600/ 2104 batches		lr 0.100		ms/batch 7.02		loss 0.69	
epoch	1		1800/ 2104 batches		lr 0.100		ms/batch 7.03		loss 0.69	
epoch	1		2000/ 2104 batches		lr 0.100		ms/batch 7.32		loss 0.69	

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| end of epoch 1 | time: 15.20s | valid loss 0.71 | valid acc 0.540 |  
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epoch	2		200/ 2104 batches		lr 0.100		ms/batch 7.77		loss 0.69	
epoch	2		400/ 2104 batches		lr 0.100		ms/batch 7.30		loss 0.69	
epoch	2		600/ 2104 batches		lr 0.100		ms/batch 7.35		loss 0.69	
epoch	2		800/ 2104 batches		lr 0.100		ms/batch 7.32		loss 0.69	
epoch	2		1000/ 2104 batches		lr 0.100		ms/batch 7.33		loss 0.68	
epoch	2		1200/ 2104 batches		lr 0.100		ms/batch 7.34		loss 0.68	
epoch	2		1400/ 2104 batches		lr 0.100		ms/batch 7.41		loss 0.68	
epoch	2		1600/ 2104 batches		lr 0.100		ms/batch 7.35		loss 0.68	
epoch	2		1800/ 2104 batches		lr 0.100		ms/batch 7.30		loss 0.68	
epoch	2		2000/ 2104 batches		lr 0.100		ms/batch 7.33		loss 0.68	

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| end of epoch 2 | time: 15.59s | valid loss 0.71 | valid acc 0.540 |  
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epoch	3		200/ 2104 batches		lr 0.100		ms/batch 7.33		loss 0.69	
epoch	3		400/ 2104 batches		lr 0.100		ms/batch 7.32		loss 0.68	
epoch	3		600/ 2104 batches		lr 0.100		ms/batch 7.33		loss 0.68	
epoch	3		800/ 2104 batches		lr 0.100		ms/batch 7.29		loss 0.68	
epoch	3		1000/ 2104 batches		lr 0.100		ms/batch 7.31		loss 0.68	
epoch	3		1200/ 2104 batches		lr 0.100		ms/batch 7.24		loss 0.68	
epoch	3		1400/ 2104 batches		lr 0.100		ms/batch 7.29		loss 0.68	
epoch	3		1600/ 2104 batches		lr 0.100		ms/batch 7.29		loss 0.68	
epoch	3		1800/ 2104 batches		lr 0.100		ms/batch 7.26		loss 0.67	
epoch	3		2000/ 2104 batches		lr 0.100		ms/batch 7.29		loss 0.66	

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| end of epoch 3 | time: 15.39s | valid loss 0.64 | valid acc 0.664 |  
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epoch	4		200/ 2104 batches		lr 0.100		ms/batch 6.77		loss 0.65	
epoch	4		400/ 2104 batches		lr 0.100		ms/batch 7.25		loss 0.64	
epoch	4		600/ 2104 batches		lr 0.100		ms/batch 7.09		loss 0.63	
epoch	4		800/ 2104 batches		lr 0.100		ms/batch 7.12		loss 0.63	
epoch	4		1000/ 2104 batches		lr 0.100		ms/batch 7.11		loss 0.61	
epoch	4		1200/ 2104 batches		lr 0.100		ms/batch 7.14		loss 0.61	
epoch	4		1400/ 2104 batches		lr 0.100		ms/batch 7.15		loss 0.60	
epoch	4		1600/ 2104 batches		lr 0.100		ms/batch 7.14		loss 0.59	
epoch	4		1800/ 2104 batches		lr 0.100		ms/batch 7.13		loss 0.59	

| epoch 4 | 2000/ 2104 batches | lr 0.100 | ms/batch 7.12 | loss 0.57 |

| end of epoch 4 | time: 15.01s | valid loss 0.62 | valid acc 0.740 |

| epoch 5 | 200/ 2104 batches | lr 0.100 | ms/batch 7.22 | loss 0.58 |

| epoch 5 | 400/ 2104 batches | lr 0.100 | ms/batch 7.11 | loss 0.57 |

| epoch 5 | 600/ 2104 batches | lr 0.100 | ms/batch 7.30 | loss 0.57 |

| epoch 5 | 800/ 2104 batches | lr 0.100 | ms/batch 7.31 | loss 0.55 |

| epoch 5 | 1000/ 2104 batches | lr 0.100 | ms/batch 7.35 | loss 0.55 |

| epoch 5 | 1200/ 2104 batches | lr 0.100 | ms/batch 7.34 | loss 0.55 |

| epoch 5 | 1400/ 2104 batches | lr 0.100 | ms/batch 7.31 | loss 0.53 |

| epoch 5 | 1600/ 2104 batches | lr 0.100 | ms/batch 7.34 | loss 0.53 |

| epoch 5 | 1800/ 2104 batches | lr 0.100 | ms/batch 7.24 | loss 0.53 |

| epoch 5 | 2000/ 2104 batches | lr 0.100 | ms/batch 7.07 | loss 0.51 |

| end of epoch 5 | time: 15.31s | valid loss 0.55 | valid acc 0.774 |

| epoch 6 | 200/ 2104 batches | lr 0.100 | ms/batch 7.07 | loss 0.52 |

| epoch 6 | 400/ 2104 batches | lr 0.100 | ms/batch 7.03 | loss 0.51 |

| epoch 6 | 600/ 2104 batches | lr 0.100 | ms/batch 7.00 | loss 0.52 |

| epoch 6 | 800/ 2104 batches | lr 0.100 | ms/batch 7.22 | loss 0.50 |

| epoch 6 | 1000/ 2104 batches | lr 0.100 | ms/batch 7.22 | loss 0.50 |

| epoch 6 | 1200/ 2104 batches | lr 0.100 | ms/batch 7.21 | loss 0.50 |

| epoch 6 | 1400/ 2104 batches | lr 0.100 | ms/batch 7.29 | loss 0.48 |

| epoch 6 | 1600/ 2104 batches | lr 0.100 | ms/batch 7.32 | loss 0.48 |

| epoch 6 | 1800/ 2104 batches | lr 0.100 | ms/batch 7.25 | loss 0.49 |

| epoch 6 | 2000/ 2104 batches | lr 0.100 | ms/batch 7.28 | loss 0.46 |

| end of epoch 6 | time: 15.19s | valid loss 0.55 | valid acc 0.760 |

| epoch 7 | 200/ 2104 batches | lr 0.025 | ms/batch 7.26 | loss 0.46 |

| epoch 7 | 400/ 2104 batches | lr 0.025 | ms/batch 7.21 | loss 0.45 |

| epoch 7 | 600/ 2104 batches | lr 0.025 | ms/batch 7.18 | loss 0.46 |

| epoch 7 | 800/ 2104 batches | lr 0.025 | ms/batch 7.18 | loss 0.45 |

| epoch 7 | 1000/ 2104 batches | lr 0.025 | ms/batch 7.17 | loss 0.45 |

| epoch 7 | 1200/ 2104 batches | lr 0.025 | ms/batch 7.18 | loss 0.46 |

| epoch 7 | 1400/ 2104 batches | lr 0.025 | ms/batch 7.33 | loss 0.44 |

| epoch 7 | 1600/ 2104 batches | lr 0.025 | ms/batch 7.04 | loss 0.44 |

| epoch 7 | 1800/ 2104 batches | lr 0.025 | ms/batch 7.28 | loss 0.44 |

| epoch 7 | 2000/ 2104 batches | lr 0.025 | ms/batch 7.48 | loss 0.43 |

| end of epoch 7 | time: 15.28s | valid loss 0.55 | valid acc 0.793 |

| epoch 8 | 200/ 2104 batches | lr 0.006 | ms/batch 7.30 | loss 0.44 |

| epoch 8 | 400/ 2104 batches | lr 0.006 | ms/batch 7.12 | loss 0.44 |

| epoch 8 | 600/ 2104 batches | lr 0.006 | ms/batch 7.10 | loss 0.45 |

| epoch 8 | 800/ 2104 batches | lr 0.006 | ms/batch 7.31 | loss 0.44 |

| epoch 8 | 1000/ 2104 batches | lr 0.006 | ms/batch 7.42 | loss 0.44 |

| epoch 8 | 1200/ 2104 batches | lr 0.006 | ms/batch 7.41 | loss 0.44 |

| epoch 8 | 1400/ 2104 batches | lr 0.006 | ms/batch 7.25 | loss 0.44 |

| epoch 8 | 1600/ 2104 batches | lr 0.006 | ms/batch 7.38 | loss 0.43 |

| epoch 8 | 1800/ 2104 batches | lr 0.006 | ms/batch 7.43 | loss 0.44 |  
| epoch 8 | 2000/ 2104 batches | lr 0.006 | ms/batch 7.40 | loss 0.42 |

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| end of epoch 8 | time: 15.46s | valid loss 0.55 | valid acc 0.793 |

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epoch 9	200/ 2104 batches	lr 0.002	ms/batch 7.42	loss 0.44
epoch 9	400/ 2104 batches	lr 0.002	ms/batch 7.32	loss 0.44
epoch 9	600/ 2104 batches	lr 0.002	ms/batch 7.07	loss 0.44
epoch 9	800/ 2104 batches	lr 0.002	ms/batch 7.17	loss 0.43
epoch 9	1000/ 2104 batches	lr 0.002	ms/batch 7.13	loss 0.44
epoch 9	1200/ 2104 batches	lr 0.002	ms/batch 7.06	loss 0.44
epoch 9	1400/ 2104 batches	lr 0.002	ms/batch 7.04	loss 0.43
epoch 9	1600/ 2104 batches	lr 0.002	ms/batch 7.08	loss 0.43
epoch 9	1800/ 2104 batches	lr 0.002	ms/batch 7.14	loss 0.44
epoch 9	2000/ 2104 batches	lr 0.002	ms/batch 7.12	loss 0.41

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| end of epoch 9 | time: 15.13s | valid loss 0.55 | valid acc 0.793 |

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epoch 10	200/ 2104 batches	lr 0.000	ms/batch 7.62	loss 0.44
epoch 10	400/ 2104 batches	lr 0.000	ms/batch 7.38	loss 0.43
epoch 10	600/ 2104 batches	lr 0.000	ms/batch 7.33	loss 0.44
epoch 10	800/ 2104 batches	lr 0.000	ms/batch 7.21	loss 0.43
epoch 10	1000/ 2104 batches	lr 0.000	ms/batch 7.28	loss 0.44
epoch 10	1200/ 2104 batches	lr 0.000	ms/batch 7.35	loss 0.44
epoch 10	1400/ 2104 batches	lr 0.000	ms/batch 7.28	loss 0.43
epoch 10	1600/ 2104 batches	lr 0.000	ms/batch 7.44	loss 0.43
epoch 10	1800/ 2104 batches	lr 0.000	ms/batch 7.40	loss 0.44
epoch 10	2000/ 2104 batches	lr 0.000	ms/batch 7.36	loss 0.42

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| end of epoch 10 | time: 15.57s | valid loss 0.55 | valid acc 0.781 |

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| End of training | test loss 0.56 | test acc 0.767 |

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learning\_rate: 0.1, dropout: 0.1, batch\_size: 64

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epoch 1	200/ 1052 batches	lr 0.100	ms/batch 8.82	loss 0.69
epoch 1	400/ 1052 batches	lr 0.100	ms/batch 7.50	loss 0.69
epoch 1	600/ 1052 batches	lr 0.100	ms/batch 7.52	loss 0.68
epoch 1	800/ 1052 batches	lr 0.100	ms/batch 7.48	loss 0.69
epoch 1	1000/ 1052 batches	lr 0.100	ms/batch 7.55	loss 0.69

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| end of epoch 1 | time: 8.22s | valid loss 0.71 | valid acc 0.540 |

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epoch 2	200/ 1052 batches	lr 0.100	ms/batch 7.46	loss 0.69
epoch 2	400/ 1052 batches	lr 0.100	ms/batch 7.34	loss 0.69
epoch 2	600/ 1052 batches	lr 0.100	ms/batch 7.34	loss 0.68
epoch 2	800/ 1052 batches	lr 0.100	ms/batch 7.38	loss 0.68

| epoch 2 | 1000/ 1052 batches | lr 0.100 | ms/batch 7.45 | loss 0.69 |

| end of epoch 2 | time: 7.85s | valid loss 0.71 | valid acc 0.540 |

| epoch 3 | 200/ 1052 batches | lr 0.100 | ms/batch 7.69 | loss 0.69 |

| epoch 3 | 400/ 1052 batches | lr 0.100 | ms/batch 7.43 | loss 0.69 |

| epoch 3 | 600/ 1052 batches | lr 0.100 | ms/batch 7.52 | loss 0.68 |

| epoch 3 | 800/ 1052 batches | lr 0.100 | ms/batch 7.44 | loss 0.68 |

| epoch 3 | 1000/ 1052 batches | lr 0.100 | ms/batch 7.41 | loss 0.68 |

| end of epoch 3 | time: 7.94s | valid loss 0.71 | valid acc 0.540 |

| epoch 4 | 200/ 1052 batches | lr 0.100 | ms/batch 7.35 | loss 0.69 |

| epoch 4 | 400/ 1052 batches | lr 0.100 | ms/batch 7.32 | loss 0.68 |

| epoch 4 | 600/ 1052 batches | lr 0.100 | ms/batch 7.18 | loss 0.68 |

| epoch 4 | 800/ 1052 batches | lr 0.100 | ms/batch 7.19 | loss 0.68 |

| epoch 4 | 1000/ 1052 batches | lr 0.100 | ms/batch 7.28 | loss 0.68 |

| end of epoch 4 | time: 7.71s | valid loss 0.71 | valid acc 0.540 |

| epoch 5 | 200/ 1052 batches | lr 0.100 | ms/batch 7.38 | loss 0.69 |

| epoch 5 | 400/ 1052 batches | lr 0.100 | ms/batch 7.36 | loss 0.68 |

| epoch 5 | 600/ 1052 batches | lr 0.100 | ms/batch 7.37 | loss 0.68 |

| epoch 5 | 800/ 1052 batches | lr 0.100 | ms/batch 7.30 | loss 0.68 |

| epoch 5 | 1000/ 1052 batches | lr 0.100 | ms/batch 7.18 | loss 0.68 |

| end of epoch 5 | time: 7.75s | valid loss 0.69 | valid acc 0.612 |

| epoch 6 | 200/ 1052 batches | lr 0.100 | ms/batch 7.47 | loss 0.67 |

| epoch 6 | 400/ 1052 batches | lr 0.100 | ms/batch 7.36 | loss 0.66 |

| epoch 6 | 600/ 1052 batches | lr 0.100 | ms/batch 7.44 | loss 0.65 |

| epoch 6 | 800/ 1052 batches | lr 0.100 | ms/batch 7.37 | loss 0.64 |

| epoch 6 | 1000/ 1052 batches | lr 0.100 | ms/batch 7.18 | loss 0.63 |

| end of epoch 6 | time: 7.80s | valid loss 0.60 | valid acc 0.702 |

| epoch 7 | 200/ 1052 batches | lr 0.100 | ms/batch 7.21 | loss 0.62 |

| epoch 7 | 400/ 1052 batches | lr 0.100 | ms/batch 7.16 | loss 0.61 |

| epoch 7 | 600/ 1052 batches | lr 0.100 | ms/batch 7.53 | loss 0.60 |

| epoch 7 | 800/ 1052 batches | lr 0.100 | ms/batch 7.19 | loss 0.59 |

| epoch 7 | 1000/ 1052 batches | lr 0.100 | ms/batch 7.41 | loss 0.58 |

| end of epoch 7 | time: 7.75s | valid loss 0.63 | valid acc 0.719 |

| epoch 8 | 200/ 1052 batches | lr 0.025 | ms/batch 7.35 | loss 0.57 |

| epoch 8 | 400/ 1052 batches | lr 0.025 | ms/batch 7.41 | loss 0.56 |

| epoch 8 | 600/ 1052 batches | lr 0.025 | ms/batch 7.34 | loss 0.56 |

| epoch 8 | 800/ 1052 batches | lr 0.025 | ms/batch 7.13 | loss 0.55 |

| epoch 8 | 1000/ 1052 batches | lr 0.025 | ms/batch 7.46 | loss 0.55 |

| end of epoch 8 | time: 7.78s | valid loss 0.54 | valid acc 0.748 |

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| epoch  9 | 200/ 1052 batches | lr 0.025 | ms/batch 7.50 | loss 0.55 |
| epoch  9 | 400/ 1052 batches | lr 0.025 | ms/batch 7.30 | loss 0.55 |
| epoch  9 | 600/ 1052 batches | lr 0.025 | ms/batch 7.47 | loss 0.55 |
| epoch  9 | 800/ 1052 batches | lr 0.025 | ms/batch 7.40 | loss 0.54 |
| epoch  9 | 1000/ 1052 batches | lr 0.025 | ms/batch 7.46 | loss 0.54 |
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| end of epoch  9 | time: 7.88s | valid loss 0.53 | valid acc 0.745 |
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| epoch 10 | 200/ 1052 batches | lr 0.025 | ms/batch 7.76 | loss 0.54 |
| epoch 10 | 400/ 1052 batches | lr 0.025 | ms/batch 7.56 | loss 0.54 |
| epoch 10 | 600/ 1052 batches | lr 0.025 | ms/batch 7.43 | loss 0.54 |
| epoch 10 | 800/ 1052 batches | lr 0.025 | ms/batch 7.44 | loss 0.53 |
| epoch 10 | 1000/ 1052 batches | lr 0.025 | ms/batch 7.35 | loss 0.52 |
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| end of epoch 10 | time: 7.97s | valid loss 0.53 | valid acc 0.752 |
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| End of training | test loss 0.58 | test acc 0.743 |
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learning_rate: 0.1, dropout: 0.2, batch_size: 32
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| epoch  1 | 200/ 2104 batches | lr 0.100 | ms/batch 8.66 | loss 0.69 |
| epoch  1 | 400/ 2104 batches | lr 0.100 | ms/batch 7.15 | loss 0.69 |
| epoch  1 | 600/ 2104 batches | lr 0.100 | ms/batch 7.02 | loss 0.69 |
| epoch  1 | 800/ 2104 batches | lr 0.100 | ms/batch 6.91 | loss 0.69 |
| epoch  1 | 1000/ 2104 batches | lr 0.100 | ms/batch 6.41 | loss 0.68 |
| epoch  1 | 1200/ 2104 batches | lr 0.100 | ms/batch 5.99 | loss 0.68 |
| epoch  1 | 1400/ 2104 batches | lr 0.100 | ms/batch 6.94 | loss 0.69 |
| epoch  1 | 1600/ 2104 batches | lr 0.100 | ms/batch 5.73 | loss 0.69 |
| epoch  1 | 1800/ 2104 batches | lr 0.100 | ms/batch 6.81 | loss 0.69 |
| epoch  1 | 2000/ 2104 batches | lr 0.100 | ms/batch 6.94 | loss 0.69 |
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| end of epoch  1 | time: 14.49s | valid loss 0.71 | valid acc 0.540 |
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| epoch  2 | 200/ 2104 batches | lr 0.100 | ms/batch 6.92 | loss 0.69 |
| epoch  2 | 400/ 2104 batches | lr 0.100 | ms/batch 6.87 | loss 0.69 |
| epoch  2 | 600/ 2104 batches | lr 0.100 | ms/batch 6.93 | loss 0.69 |
| epoch  2 | 800/ 2104 batches | lr 0.100 | ms/batch 6.96 | loss 0.69 |
| epoch  2 | 1000/ 2104 batches | lr 0.100 | ms/batch 6.95 | loss 0.68 |
| epoch  2 | 1200/ 2104 batches | lr 0.100 | ms/batch 7.02 | loss 0.68 |
| epoch  2 | 1400/ 2104 batches | lr 0.100 | ms/batch 7.01 | loss 0.68 |
| epoch  2 | 1600/ 2104 batches | lr 0.100 | ms/batch 7.02 | loss 0.68 |
| epoch  2 | 1800/ 2104 batches | lr 0.100 | ms/batch 7.08 | loss 0.68 |
| epoch  2 | 2000/ 2104 batches | lr 0.100 | ms/batch 7.22 | loss 0.68 |
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| end of epoch  2 | time: 14.80s | valid loss 0.71 | valid acc 0.540 |
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epoch	3	200/ 2104 batches	lr 0.100	ms/batch 5.82	loss 0.69	
epoch	3	400/ 2104 batches	lr 0.100	ms/batch 5.92	loss 0.68	
epoch	3	600/ 2104 batches	lr 0.100	ms/batch 5.79	loss 0.68	
epoch	3	800/ 2104 batches	lr 0.100	ms/batch 7.20	loss 0.68	
epoch	3	1000/ 2104 batches	lr 0.100	ms/batch 7.22	loss 0.68	
epoch	3	1200/ 2104 batches	lr 0.100	ms/batch 7.27	loss 0.68	
epoch	3	1400/ 2104 batches	lr 0.100	ms/batch 7.16	loss 0.68	
epoch	3	1600/ 2104 batches	lr 0.100	ms/batch 7.19	loss 0.68	
epoch	3	1800/ 2104 batches	lr 0.100	ms/batch 7.51	loss 0.67	
epoch	3	2000/ 2104 batches	lr 0.100	ms/batch 7.25	loss 0.66	

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| end of epoch 3 | time: 14.47s | valid loss 0.65 | valid acc 0.674 |  
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epoch	4	200/ 2104 batches	lr 0.100	ms/batch 7.78	loss 0.65	
epoch	4	400/ 2104 batches	lr 0.100	ms/batch 7.24	loss 0.64	
epoch	4	600/ 2104 batches	lr 0.100	ms/batch 7.17	loss 0.64	
epoch	4	800/ 2104 batches	lr 0.100	ms/batch 7.25	loss 0.63	
epoch	4	1000/ 2104 batches	lr 0.100	ms/batch 7.25	loss 0.62	
epoch	4	1200/ 2104 batches	lr 0.100	ms/batch 7.33	loss 0.62	
epoch	4	1400/ 2104 batches	lr 0.100	ms/batch 7.17	loss 0.61	
epoch	4	1600/ 2104 batches	lr 0.100	ms/batch 7.07	loss 0.60	
epoch	4	1800/ 2104 batches	lr 0.100	ms/batch 6.93	loss 0.60	
epoch	4	2000/ 2104 batches	lr 0.100	ms/batch 6.91	loss 0.58	

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| end of epoch 4 | time: 15.21s | valid loss 0.60 | valid acc 0.745 |  
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epoch	5	200/ 2104 batches	lr 0.100	ms/batch 6.89	loss 0.59	
epoch	5	400/ 2104 batches	lr 0.100	ms/batch 6.84	loss 0.58	
epoch	5	600/ 2104 batches	lr 0.100	ms/batch 6.83	loss 0.58	
epoch	5	800/ 2104 batches	lr 0.100	ms/batch 7.02	loss 0.56	
epoch	5	1000/ 2104 batches	lr 0.100	ms/batch 7.26	loss 0.56	
epoch	5	1200/ 2104 batches	lr 0.100	ms/batch 7.24	loss 0.56	
epoch	5	1400/ 2104 batches	lr 0.100	ms/batch 7.22	loss 0.55	
epoch	5	1600/ 2104 batches	lr 0.100	ms/batch 7.28	loss 0.54	
epoch	5	1800/ 2104 batches	lr 0.100	ms/batch 7.24	loss 0.54	
epoch	5	2000/ 2104 batches	lr 0.100	ms/batch 7.24	loss 0.53	

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| end of epoch 5 | time: 15.02s | valid loss 0.53 | valid acc 0.764 |  
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epoch	6	200/ 2104 batches	lr 0.100	ms/batch 7.27	loss 0.53	
epoch	6	400/ 2104 batches	lr 0.100	ms/batch 7.15	loss 0.52	
epoch	6	600/ 2104 batches	lr 0.100	ms/batch 7.10	loss 0.53	
epoch	6	800/ 2104 batches	lr 0.100	ms/batch 7.08	loss 0.51	
epoch	6	1000/ 2104 batches	lr 0.100	ms/batch 7.12	loss 0.51	
epoch	6	1200/ 2104 batches	lr 0.100	ms/batch 7.12	loss 0.51	
epoch	6	1400/ 2104 batches	lr 0.100	ms/batch 7.12	loss 0.49	
epoch	6	1600/ 2104 batches	lr 0.100	ms/batch 7.12	loss 0.50	
epoch	6	1800/ 2104 batches	lr 0.100	ms/batch 7.24	loss 0.50	
epoch	6	2000/ 2104 batches	lr 0.100	ms/batch 7.05	loss 0.47	

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| end of epoch 6 | time: 15.08s | valid loss 0.52 | valid acc 0.786 |  
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epoch	7		200/ 2104 batches		lr 0.100		ms/batch 7.39		loss 0.49	
epoch	7		400/ 2104 batches		lr 0.100		ms/batch 7.37		loss 0.48	
epoch	7		600/ 2104 batches		lr 0.100		ms/batch 7.41		loss 0.48	
epoch	7		800/ 2104 batches		lr 0.100		ms/batch 7.31		loss 0.47	
epoch	7		1000/ 2104 batches		lr 0.100		ms/batch 7.28		loss 0.47	
epoch	7		1200/ 2104 batches		lr 0.100		ms/batch 7.25		loss 0.47	
epoch	7		1400/ 2104 batches		lr 0.100		ms/batch 7.22		loss 0.46	
epoch	7		1600/ 2104 batches		lr 0.100		ms/batch 7.22		loss 0.45	
epoch	7		1800/ 2104 batches		lr 0.100		ms/batch 7.06		loss 0.46	
epoch	7		2000/ 2104 batches		lr 0.100		ms/batch 6.98		loss 0.44	

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| end of epoch 7 | time: 15.27s | valid loss 0.53 | valid acc 0.781 |

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epoch	8		200/ 2104 batches		lr 0.025		ms/batch 7.01		loss 0.44	
epoch	8		400/ 2104 batches		lr 0.025		ms/batch 7.12		loss 0.43	
epoch	8		600/ 2104 batches		lr 0.025		ms/batch 7.08		loss 0.44	
epoch	8		800/ 2104 batches		lr 0.025		ms/batch 7.12		loss 0.43	
epoch	8		1000/ 2104 batches		lr 0.025		ms/batch 7.08		loss 0.43	
epoch	8		1200/ 2104 batches		lr 0.025		ms/batch 7.09		loss 0.43	
epoch	8		1400/ 2104 batches		lr 0.025		ms/batch 7.07		loss 0.43	
epoch	8		1600/ 2104 batches		lr 0.025		ms/batch 7.06		loss 0.42	
epoch	8		1800/ 2104 batches		lr 0.025		ms/batch 6.97		loss 0.43	
epoch	8		2000/ 2104 batches		lr 0.025		ms/batch 7.07		loss 0.41	

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| end of epoch 8 | time: 14.93s | valid loss 0.56 | valid acc 0.779 |

---

epoch	9		200/ 2104 batches		lr 0.006		ms/batch 7.11		loss 0.43	
epoch	9		400/ 2104 batches		lr 0.006		ms/batch 7.10		loss 0.42	
epoch	9		600/ 2104 batches		lr 0.006		ms/batch 7.08		loss 0.43	
epoch	9		800/ 2104 batches		lr 0.006		ms/batch 7.07		loss 0.42	
epoch	9		1000/ 2104 batches		lr 0.006		ms/batch 7.11		loss 0.42	
epoch	9		1200/ 2104 batches		lr 0.006		ms/batch 7.18		loss 0.43	
epoch	9		1400/ 2104 batches		lr 0.006		ms/batch 7.22		loss 0.42	
epoch	9		1600/ 2104 batches		lr 0.006		ms/batch 7.07		loss 0.41	
epoch	9		1800/ 2104 batches		lr 0.006		ms/batch 7.10		loss 0.42	
epoch	9		2000/ 2104 batches		lr 0.006		ms/batch 7.13		loss 0.40	

---

| end of epoch 9 | time: 15.03s | valid loss 0.55 | valid acc 0.790 |

---

epoch	10		200/ 2104 batches		lr 0.002		ms/batch 6.66		loss 0.42	
epoch	10		400/ 2104 batches		lr 0.002		ms/batch 7.18		loss 0.42	
epoch	10		600/ 2104 batches		lr 0.002		ms/batch 7.23		loss 0.43	
epoch	10		800/ 2104 batches		lr 0.002		ms/batch 7.26		loss 0.41	
epoch	10		1000/ 2104 batches		lr 0.002		ms/batch 7.16		loss 0.42	
epoch	10		1200/ 2104 batches		lr 0.002		ms/batch 7.12		loss 0.43	
epoch	10		1400/ 2104 batches		lr 0.002		ms/batch 7.12		loss 0.42	
epoch	10		1600/ 2104 batches		lr 0.002		ms/batch 7.25		loss 0.41	
epoch	10		1800/ 2104 batches		lr 0.002		ms/batch 7.26		loss 0.42	
epoch	10		2000/ 2104 batches		lr 0.002		ms/batch 7.25		loss 0.40	

---

| end of epoch 10 | time: 15.11s | valid loss 0.55 | valid acc 0.798 |

==  
| End of training | test loss 0.56 | test acc 0.776 |

learning\_rate: 0.1, dropout: 0.2, batch\_size: 64

epoch 1	200/ 1052 batches	lr 0.100	ms/batch 8.69	loss 0.69
epoch 1	400/ 1052 batches	lr 0.100	ms/batch 7.52	loss 0.69
epoch 1	600/ 1052 batches	lr 0.100	ms/batch 7.51	loss 0.68
epoch 1	800/ 1052 batches	lr 0.100	ms/batch 7.52	loss 0.69
epoch 1	1000/ 1052 batches	lr 0.100	ms/batch 7.62	loss 0.69

| end of epoch 1 | time: 8.23s | valid loss 0.71 | valid acc 0.540 |

epoch 2	200/ 1052 batches	lr 0.100	ms/batch 7.35	loss 0.69
epoch 2	400/ 1052 batches	lr 0.100	ms/batch 7.29	loss 0.69
epoch 2	600/ 1052 batches	lr 0.100	ms/batch 7.41	loss 0.68
epoch 2	800/ 1052 batches	lr 0.100	ms/batch 7.32	loss 0.68
epoch 2	1000/ 1052 batches	lr 0.100	ms/batch 7.23	loss 0.69

| end of epoch 2 | time: 7.76s | valid loss 0.71 | valid acc 0.540 |

epoch 3	200/ 1052 batches	lr 0.100	ms/batch 7.18	loss 0.69
epoch 3	400/ 1052 batches	lr 0.100	ms/batch 7.20	loss 0.69
epoch 3	600/ 1052 batches	lr 0.100	ms/batch 7.20	loss 0.68
epoch 3	800/ 1052 batches	lr 0.100	ms/batch 7.24	loss 0.68
epoch 3	1000/ 1052 batches	lr 0.100	ms/batch 7.36	loss 0.68

| end of epoch 3 | time: 7.68s | valid loss 0.71 | valid acc 0.540 |

epoch 4	200/ 1052 batches	lr 0.100	ms/batch 7.38	loss 0.69
epoch 4	400/ 1052 batches	lr 0.100	ms/batch 7.33	loss 0.68
epoch 4	600/ 1052 batches	lr 0.100	ms/batch 7.27	loss 0.68
epoch 4	800/ 1052 batches	lr 0.100	ms/batch 7.37	loss 0.68
epoch 4	1000/ 1052 batches	lr 0.100	ms/batch 7.53	loss 0.68

| end of epoch 4 | time: 7.83s | valid loss 0.71 | valid acc 0.540 |

epoch 5	200/ 1052 batches	lr 0.100	ms/batch 7.37	loss 0.69
epoch 5	400/ 1052 batches	lr 0.100	ms/batch 7.44	loss 0.68
epoch 5	600/ 1052 batches	lr 0.100	ms/batch 7.47	loss 0.68
epoch 5	800/ 1052 batches	lr 0.100	ms/batch 7.48	loss 0.68
epoch 5	1000/ 1052 batches	lr 0.100	ms/batch 7.46	loss 0.68

| end of epoch 5 | time: 7.89s | valid loss 0.69 | valid acc 0.614 |

| epoch 6 | 200/ 1052 batches | lr 0.100 | ms/batch 7.43 | loss 0.68 |



```
| epoch 6 | 400/ 1052 batches | lr 0.100 | ms/batch 7.44 | loss 0.67 |
| epoch 6 | 600/ 1052 batches | lr 0.100 | ms/batch 7.32 | loss 0.65 |
| epoch 6 | 800/ 1052 batches | lr 0.100 | ms/batch 7.51 | loss 0.65 |
| epoch 6 | 1000/ 1052 batches | lr 0.100 | ms/batch 7.55 | loss 0.63 |
```

```
-----
| end of epoch 6 | time: 7.90s | valid loss 0.60 | valid acc 0.702 |
-----
```

```
| epoch 7 | 200/ 1052 batches | lr 0.100 | ms/batch 7.65 | loss 0.63 |
| epoch 7 | 400/ 1052 batches | lr 0.100 | ms/batch 7.41 | loss 0.62 |
| epoch 7 | 600/ 1052 batches | lr 0.100 | ms/batch 7.54 | loss 0.61 |
| epoch 7 | 800/ 1052 batches | lr 0.100 | ms/batch 7.55 | loss 0.60 |
| epoch 7 | 1000/ 1052 batches | lr 0.100 | ms/batch 7.41 | loss 0.59 |
```

```
-----
| end of epoch 7 | time: 7.97s | valid loss 0.62 | valid acc 0.719 |
-----
```

```
| epoch 8 | 200/ 1052 batches | lr 0.025 | ms/batch 7.49 | loss 0.58 |
| epoch 8 | 400/ 1052 batches | lr 0.025 | ms/batch 7.46 | loss 0.57 |
| epoch 8 | 600/ 1052 batches | lr 0.025 | ms/batch 7.37 | loss 0.57 |
| epoch 8 | 800/ 1052 batches | lr 0.025 | ms/batch 7.31 | loss 0.56 |
| epoch 8 | 1000/ 1052 batches | lr 0.025 | ms/batch 7.27 | loss 0.56 |
```

```
-----
| end of epoch 8 | time: 7.82s | valid loss 0.54 | valid acc 0.740 |
-----
```

```
| epoch 9 | 200/ 1052 batches | lr 0.025 | ms/batch 7.31 | loss 0.56 |
| epoch 9 | 400/ 1052 batches | lr 0.025 | ms/batch 6.59 | loss 0.56 |
| epoch 9 | 600/ 1052 batches | lr 0.025 | ms/batch 5.33 | loss 0.56 |
| epoch 9 | 800/ 1052 batches | lr 0.025 | ms/batch 6.25 | loss 0.55 |
| epoch 9 | 1000/ 1052 batches | lr 0.025 | ms/batch 7.65 | loss 0.55 |
```

```
-----
| end of epoch 9 | time: 7.09s | valid loss 0.53 | valid acc 0.755 |
-----
```

```
| epoch 10 | 200/ 1052 batches | lr 0.025 | ms/batch 7.64 | loss 0.55 |
| epoch 10 | 400/ 1052 batches | lr 0.025 | ms/batch 7.68 | loss 0.55 |
| epoch 10 | 600/ 1052 batches | lr 0.025 | ms/batch 7.51 | loss 0.55 |
| epoch 10 | 800/ 1052 batches | lr 0.025 | ms/batch 7.51 | loss 0.54 |
| epoch 10 | 1000/ 1052 batches | lr 0.025 | ms/batch 7.50 | loss 0.53 |
```

```
-----
| end of epoch 10 | time: 8.02s | valid loss 0.53 | valid acc 0.745 |
-----
```

```
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```

```
| End of training | test loss 0.56 | test acc 0.738 |
```

```
=====
```

```
-----
learning_rate: 1, dropout: 0.1, batch_size: 32
-----
```

```
| epoch 1 | 200/ 2104 batches | lr 1.000 | ms/batch 7.99 | loss 0.70 |
| epoch 1 | 400/ 2104 batches | lr 1.000 | ms/batch 6.92 | loss 0.69 |
| epoch 1 | 600/ 2104 batches | lr 1.000 | ms/batch 6.94 | loss 0.69 |
| epoch 1 | 800/ 2104 batches | lr 1.000 | ms/batch 6.94 | loss 0.69 |
```

epoch	1	1000/ 2104 batches	lr 1.000	ms/batch 7.01	loss 0.69	
epoch	1	1200/ 2104 batches	lr 1.000	ms/batch 6.96	loss 0.69	
epoch	1	1400/ 2104 batches	lr 1.000	ms/batch 7.07	loss 0.69	
epoch	1	1600/ 2104 batches	lr 1.000	ms/batch 7.10	loss 0.68	
epoch	1	1800/ 2104 batches	lr 1.000	ms/batch 6.94	loss 0.65	
epoch	1	2000/ 2104 batches	lr 1.000	ms/batch 6.99	loss 0.60	

-----

end of epoch	1	time: 14.96s	valid loss 0.67	valid acc 0.662	
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epoch	2	200/ 2104 batches	lr 1.000	ms/batch 7.12	loss 0.55	
epoch	2	400/ 2104 batches	lr 1.000	ms/batch 7.07	loss 0.51	
epoch	2	600/ 2104 batches	lr 1.000	ms/batch 6.97	loss 0.49	
epoch	2	800/ 2104 batches	lr 1.000	ms/batch 7.08	loss 0.47	
epoch	2	1000/ 2104 batches	lr 1.000	ms/batch 7.02	loss 0.45	
epoch	2	1200/ 2104 batches	lr 1.000	ms/batch 7.10	loss 0.44	
epoch	2	1400/ 2104 batches	lr 1.000	ms/batch 7.29	loss 0.41	
epoch	2	1600/ 2104 batches	lr 1.000	ms/batch 7.33	loss 0.39	
epoch	2	1800/ 2104 batches	lr 1.000	ms/batch 7.30	loss 0.38	
epoch	2	2000/ 2104 batches	lr 1.000	ms/batch 7.30	loss 0.36	

-----

end of epoch	2	time: 15.13s	valid loss 0.84	valid acc 0.764	
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epoch	3	200/ 2104 batches	lr 0.250	ms/batch 7.33	loss 0.32	
epoch	3	400/ 2104 batches	lr 0.250	ms/batch 7.39	loss 0.30	
epoch	3	600/ 2104 batches	lr 0.250	ms/batch 7.20	loss 0.31	
epoch	3	800/ 2104 batches	lr 0.250	ms/batch 7.06	loss 0.29	
epoch	3	1000/ 2104 batches	lr 0.250	ms/batch 7.12	loss 0.28	
epoch	3	1200/ 2104 batches	lr 0.250	ms/batch 7.14	loss 0.29	
epoch	3	1400/ 2104 batches	lr 0.250	ms/batch 7.22	loss 0.27	
epoch	3	1600/ 2104 batches	lr 0.250	ms/batch 7.24	loss 0.26	
epoch	3	1800/ 2104 batches	lr 0.250	ms/batch 7.27	loss 0.26	
epoch	3	2000/ 2104 batches	lr 0.250	ms/batch 7.23	loss 0.24	

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end of epoch	3	time: 15.25s	valid loss 0.65	valid acc 0.812	
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epoch	4	200/ 2104 batches	lr 0.250	ms/batch 7.30	loss 0.28	
epoch	4	400/ 2104 batches	lr 0.250	ms/batch 7.19	loss 0.27	
epoch	4	600/ 2104 batches	lr 0.250	ms/batch 7.08	loss 0.27	
epoch	4	800/ 2104 batches	lr 0.250	ms/batch 7.23	loss 0.26	
epoch	4	1000/ 2104 batches	lr 0.250	ms/batch 7.28	loss 0.26	
epoch	4	1200/ 2104 batches	lr 0.250	ms/batch 7.30	loss 0.27	
epoch	4	1400/ 2104 batches	lr 0.250	ms/batch 7.35	loss 0.24	
epoch	4	1600/ 2104 batches	lr 0.250	ms/batch 7.28	loss 0.24	
epoch	4	1800/ 2104 batches	lr 0.250	ms/batch 7.26	loss 0.24	
epoch	4	2000/ 2104 batches	lr 0.250	ms/batch 7.32	loss 0.22	

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end of epoch	4	time: 15.34s	valid loss 0.64	valid acc 0.817	
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epoch	5	200/ 2104 batches	lr 0.250	ms/batch 7.33	loss 0.26	
epoch	5	400/ 2104 batches	lr 0.250	ms/batch 7.17	loss 0.24	
epoch	5	600/ 2104 batches	lr 0.250	ms/batch 7.11	loss 0.25	

epoch	5		800/ 2104 batches		lr 0.250		ms/batch 7.11		loss 0.24	
epoch	5		1000/ 2104 batches		lr 0.250		ms/batch 7.22		loss 0.23	
epoch	5		1200/ 2104 batches		lr 0.250		ms/batch 7.49		loss 0.25	
epoch	5		1400/ 2104 batches		lr 0.250		ms/batch 7.22		loss 0.22	
epoch	5		1600/ 2104 batches		lr 0.250		ms/batch 7.31		loss 0.22	
epoch	5		1800/ 2104 batches		lr 0.250		ms/batch 7.26		loss 0.22	
epoch	5		2000/ 2104 batches		lr 0.250		ms/batch 7.39		loss 0.21	

-----

end of epoch	5		time: 15.30s		valid loss 0.66		valid acc 0.829	
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epoch	6		200/ 2104 batches		lr 0.062		ms/batch 7.02		loss 0.24	
epoch	6		400/ 2104 batches		lr 0.062		ms/batch 7.15		loss 0.22	
epoch	6		600/ 2104 batches		lr 0.062		ms/batch 7.22		loss 0.23	
epoch	6		800/ 2104 batches		lr 0.062		ms/batch 7.26		loss 0.22	
epoch	6		1000/ 2104 batches		lr 0.062		ms/batch 7.31		loss 0.20	
epoch	6		1200/ 2104 batches		lr 0.062		ms/batch 7.45		loss 0.22	
epoch	6		1400/ 2104 batches		lr 0.062		ms/batch 7.15		loss 0.20	
epoch	6		1600/ 2104 batches		lr 0.062		ms/batch 7.07		loss 0.19	
epoch	6		1800/ 2104 batches		lr 0.062		ms/batch 7.07		loss 0.19	
epoch	6		2000/ 2104 batches		lr 0.062		ms/batch 7.23		loss 0.18	

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end of epoch	6		time: 15.21s		valid loss 0.67		valid acc 0.821	
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epoch	7		200/ 2104 batches		lr 0.016		ms/batch 7.27		loss 0.23	
epoch	7		400/ 2104 batches		lr 0.016		ms/batch 7.23		loss 0.21	
epoch	7		600/ 2104 batches		lr 0.016		ms/batch 7.21		loss 0.22	
epoch	7		800/ 2104 batches		lr 0.016		ms/batch 7.23		loss 0.21	
epoch	7		1000/ 2104 batches		lr 0.016		ms/batch 7.19		loss 0.19	
epoch	7		1200/ 2104 batches		lr 0.016		ms/batch 7.21		loss 0.22	
epoch	7		1400/ 2104 batches		lr 0.016		ms/batch 7.33		loss 0.19	
epoch	7		1600/ 2104 batches		lr 0.016		ms/batch 6.94		loss 0.18	
epoch	7		1800/ 2104 batches		lr 0.016		ms/batch 6.75		loss 0.18	
epoch	7		2000/ 2104 batches		lr 0.016		ms/batch 5.84		loss 0.17	

-----

end of epoch	7		time: 14.84s		valid loss 0.67		valid acc 0.821	
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-----

epoch	8		200/ 2104 batches		lr 0.004		ms/batch 7.32		loss 0.23	
epoch	8		400/ 2104 batches		lr 0.004		ms/batch 7.30		loss 0.20	
epoch	8		600/ 2104 batches		lr 0.004		ms/batch 7.28		loss 0.22	
epoch	8		800/ 2104 batches		lr 0.004		ms/batch 7.32		loss 0.21	
epoch	8		1000/ 2104 batches		lr 0.004		ms/batch 7.37		loss 0.19	
epoch	8		1200/ 2104 batches		lr 0.004		ms/batch 7.29		loss 0.21	
epoch	8		1400/ 2104 batches		lr 0.004		ms/batch 7.16		loss 0.19	
epoch	8		1600/ 2104 batches		lr 0.004		ms/batch 7.11		loss 0.18	
epoch	8		1800/ 2104 batches		lr 0.004		ms/batch 7.18		loss 0.18	
epoch	8		2000/ 2104 batches		lr 0.004		ms/batch 7.21		loss 0.17	

-----

end of epoch	8		time: 15.32s		valid loss 0.67		valid acc 0.829	
--------------	---	--	--------------	--	-----------------	--	-----------------	--

-----

epoch	9		200/ 2104 batches		lr 0.001		ms/batch 7.31		loss 0.23	
epoch	9		400/ 2104 batches		lr 0.001		ms/batch 7.25		loss 0.21	

```
| epoch 9 | 600/ 2104 batches | lr 0.001 | ms/batch 7.27 | loss 0.22 |
| epoch 9 | 800/ 2104 batches | lr 0.001 | ms/batch 7.19 | loss 0.21 |
| epoch 9 | 1000/ 2104 batches | lr 0.001 | ms/batch 7.23 | loss 0.19 |
| epoch 9 | 1200/ 2104 batches | lr 0.001 | ms/batch 7.33 | loss 0.21 |
| epoch 9 | 1400/ 2104 batches | lr 0.001 | ms/batch 7.26 | loss 0.19 |
| epoch 9 | 1600/ 2104 batches | lr 0.001 | ms/batch 7.28 | loss 0.18 |
| epoch 9 | 1800/ 2104 batches | lr 0.001 | ms/batch 7.10 | loss 0.18 |
| epoch 9 | 2000/ 2104 batches | lr 0.001 | ms/batch 7.23 | loss 0.17 |
```

```
-----
| end of epoch 9 | time: 15.28s | valid loss 0.67 | valid acc 0.831 |
-----
```

```
| epoch 10 | 200/ 2104 batches | lr 0.000 | ms/batch 7.01 | loss 0.23 |
| epoch 10 | 400/ 2104 batches | lr 0.000 | ms/batch 6.83 | loss 0.21 |
| epoch 10 | 600/ 2104 batches | lr 0.000 | ms/batch 7.39 | loss 0.22 |
| epoch 10 | 800/ 2104 batches | lr 0.000 | ms/batch 7.07 | loss 0.21 |
| epoch 10 | 1000/ 2104 batches | lr 0.000 | ms/batch 7.07 | loss 0.19 |
| epoch 10 | 1200/ 2104 batches | lr 0.000 | ms/batch 7.28 | loss 0.21 |
| epoch 10 | 1400/ 2104 batches | lr 0.000 | ms/batch 7.29 | loss 0.19 |
| epoch 10 | 1600/ 2104 batches | lr 0.000 | ms/batch 7.04 | loss 0.18 |
| epoch 10 | 1800/ 2104 batches | lr 0.000 | ms/batch 6.99 | loss 0.18 |
| epoch 10 | 2000/ 2104 batches | lr 0.000 | ms/batch 7.07 | loss 0.17 |
```

```
-----
| end of epoch 10 | time: 15.03s | valid loss 0.67 | valid acc 0.824 |
-----
```

```
=====
==
| End of training | test loss 0.56 | test acc 0.855 |
=====
==
```

```
-----
learning_rate: 1, dropout: 0.1, batch_size: 64
-----
```

```
| epoch 1 | 200/ 1052 batches | lr 1.000 | ms/batch 8.68 | loss 0.69 |
| epoch 1 | 400/ 1052 batches | lr 1.000 | ms/batch 7.51 | loss 0.69 |
| epoch 1 | 600/ 1052 batches | lr 1.000 | ms/batch 7.44 | loss 0.69 |
| epoch 1 | 800/ 1052 batches | lr 1.000 | ms/batch 7.50 | loss 0.69 |
| epoch 1 | 1000/ 1052 batches | lr 1.000 | ms/batch 7.50 | loss 0.69 |
```

```
-----
| end of epoch 1 | time: 8.18s | valid loss 0.70 | valid acc 0.555 |
-----
```

```
| epoch 2 | 200/ 1052 batches | lr 1.000 | ms/batch 7.42 | loss 0.67 |
| epoch 2 | 400/ 1052 batches | lr 1.000 | ms/batch 7.44 | loss 0.63 |
| epoch 2 | 600/ 1052 batches | lr 1.000 | ms/batch 7.21 | loss 0.57 |
| epoch 2 | 800/ 1052 batches | lr 1.000 | ms/batch 7.47 | loss 0.53 |
| epoch 2 | 1000/ 1052 batches | lr 1.000 | ms/batch 7.40 | loss 0.49 |
```

```
-----
| end of epoch 2 | time: 7.83s | valid loss 0.57 | valid acc 0.736 |
-----
```

```
| epoch 3 | 200/ 1052 batches | lr 1.000 | ms/batch 7.49 | loss 0.45 |
| epoch 3 | 400/ 1052 batches | lr 1.000 | ms/batch 7.36 | loss 0.43 |
| epoch 3 | 600/ 1052 batches | lr 1.000 | ms/batch 7.36 | loss 0.41 |
```

| epoch 3 | 800/ 1052 batches | lr 1.000 | ms/batch 7.40 | loss 0.38 |  
| epoch 3 | 1000/ 1052 batches | lr 1.000 | ms/batch 7.39 | loss 0.36 |

-----  
| end of epoch 3 | time: 7.84s | valid loss 0.58 | valid acc 0.786 |

-----  
epoch 4	200/ 1052 batches	lr 0.250	ms/batch 7.43	loss 0.31
epoch 4	400/ 1052 batches	lr 0.250	ms/batch 7.49	loss 0.30
epoch 4	600/ 1052 batches	lr 0.250	ms/batch 6.48	loss 0.28
epoch 4	800/ 1052 batches	lr 0.250	ms/batch 7.51	loss 0.27
epoch 4	1000/ 1052 batches	lr 0.250	ms/batch 7.44	loss 0.26

-----  
| end of epoch 4 | time: 7.72s | valid loss 0.61 | valid acc 0.812 |

-----  
epoch 5	200/ 1052 batches	lr 0.062	ms/batch 7.52	loss 0.27
epoch 5	400/ 1052 batches	lr 0.062	ms/batch 7.49	loss 0.27
epoch 5	600/ 1052 batches	lr 0.062	ms/batch 7.46	loss 0.26
epoch 5	800/ 1052 batches	lr 0.062	ms/batch 7.43	loss 0.24
epoch 5	1000/ 1052 batches	lr 0.062	ms/batch 7.45	loss 0.23

-----  
| end of epoch 5 | time: 7.92s | valid loss 0.62 | valid acc 0.810 |

-----  
epoch 6	200/ 1052 batches	lr 0.016	ms/batch 7.55	loss 0.26
epoch 6	400/ 1052 batches	lr 0.016	ms/batch 7.39	loss 0.26
epoch 6	600/ 1052 batches	lr 0.016	ms/batch 7.15	loss 0.25
epoch 6	800/ 1052 batches	lr 0.016	ms/batch 7.32	loss 0.23
epoch 6	1000/ 1052 batches	lr 0.016	ms/batch 7.50	loss 0.23

-----  
| end of epoch 6 | time: 7.83s | valid loss 0.61 | valid acc 0.810 |

-----  
epoch 7	200/ 1052 batches	lr 0.004	ms/batch 7.62	loss 0.26
epoch 7	400/ 1052 batches	lr 0.004	ms/batch 7.43	loss 0.26
epoch 7	600/ 1052 batches	lr 0.004	ms/batch 7.47	loss 0.24
epoch 7	800/ 1052 batches	lr 0.004	ms/batch 7.50	loss 0.23
epoch 7	1000/ 1052 batches	lr 0.004	ms/batch 7.54	loss 0.23

-----  
| end of epoch 7 | time: 7.95s | valid loss 0.61 | valid acc 0.810 |

-----  
epoch 8	200/ 1052 batches	lr 0.001	ms/batch 7.43	loss 0.26
epoch 8	400/ 1052 batches	lr 0.001	ms/batch 7.51	loss 0.25
epoch 8	600/ 1052 batches	lr 0.001	ms/batch 7.51	loss 0.25
epoch 8	800/ 1052 batches	lr 0.001	ms/batch 7.46	loss 0.23
epoch 8	1000/ 1052 batches	lr 0.001	ms/batch 7.29	loss 0.22

-----  
| end of epoch 8 | time: 7.89s | valid loss 0.61 | valid acc 0.810 |

-----  
epoch 9	200/ 1052 batches	lr 0.000	ms/batch 7.41	loss 0.26
epoch 9	400/ 1052 batches	lr 0.000	ms/batch 7.46	loss 0.25
epoch 9	600/ 1052 batches	lr 0.000	ms/batch 7.40	loss 0.24
epoch 9	800/ 1052 batches	lr 0.000	ms/batch 7.44	loss 0.23
epoch 9	1000/ 1052 batches	lr 0.000	ms/batch 7.41	loss 0.22

-----

| end of epoch 9 | time: 7.87s | valid loss 0.61 | valid acc 0.810 |

epoch 10	200/ 1052 batches	lr 0.000	ms/batch 7.45	loss 0.26
epoch 10	400/ 1052 batches	lr 0.000	ms/batch 7.26	loss 0.25
epoch 10	600/ 1052 batches	lr 0.000	ms/batch 7.32	loss 0.25
epoch 10	800/ 1052 batches	lr 0.000	ms/batch 7.41	loss 0.23
epoch 10	1000/ 1052 batches	lr 0.000	ms/batch 7.48	loss 0.22

| end of epoch 10 | time: 7.83s | valid loss 0.61 | valid acc 0.810 |

==  
| End of training | test loss 0.55 | test acc 0.779 |  
==

learning\_rate: 1, dropout: 0.2, batch\_size: 32

epoch 1	200/ 2104 batches	lr 1.000	ms/batch 8.10	loss 0.70
epoch 1	400/ 2104 batches	lr 1.000	ms/batch 6.16	loss 0.69
epoch 1	600/ 2104 batches	lr 1.000	ms/batch 6.76	loss 0.69
epoch 1	800/ 2104 batches	lr 1.000	ms/batch 7.30	loss 0.69
epoch 1	1000/ 2104 batches	lr 1.000	ms/batch 7.33	loss 0.69
epoch 1	1200/ 2104 batches	lr 1.000	ms/batch 7.33	loss 0.69
epoch 1	1400/ 2104 batches	lr 1.000	ms/batch 7.39	loss 0.69
epoch 1	1600/ 2104 batches	lr 1.000	ms/batch 7.27	loss 0.68
epoch 1	1800/ 2104 batches	lr 1.000	ms/batch 6.96	loss 0.65
epoch 1	2000/ 2104 batches	lr 1.000	ms/batch 7.01	loss 0.60

| end of epoch 1 | time: 15.11s | valid loss 0.66 | valid acc 0.681 |

epoch 2	200/ 2104 batches	lr 1.000	ms/batch 7.38	loss 0.54
epoch 2	400/ 2104 batches	lr 1.000	ms/batch 7.02	loss 0.51
epoch 2	600/ 2104 batches	lr 1.000	ms/batch 7.04	loss 0.50
epoch 2	800/ 2104 batches	lr 1.000	ms/batch 7.12	loss 0.48
epoch 2	1000/ 2104 batches	lr 1.000	ms/batch 7.02	loss 0.46
epoch 2	1200/ 2104 batches	lr 1.000	ms/batch 7.28	loss 0.44
epoch 2	1400/ 2104 batches	lr 1.000	ms/batch 7.28	loss 0.41
epoch 2	1600/ 2104 batches	lr 1.000	ms/batch 7.27	loss 0.39
epoch 2	1800/ 2104 batches	lr 1.000	ms/batch 7.29	loss 0.38
epoch 2	2000/ 2104 batches	lr 1.000	ms/batch 7.27	loss 0.37

| end of epoch 2 | time: 15.21s | valid loss 0.80 | valid acc 0.769 |

epoch 3	200/ 2104 batches	lr 0.250	ms/batch 7.32	loss 0.33
epoch 3	400/ 2104 batches	lr 0.250	ms/batch 7.21	loss 0.31
epoch 3	600/ 2104 batches	lr 0.250	ms/batch 7.22	loss 0.32
epoch 3	800/ 2104 batches	lr 0.250	ms/batch 7.05	loss 0.30
epoch 3	1000/ 2104 batches	lr 0.250	ms/batch 7.07	loss 0.30
epoch 3	1200/ 2104 batches	lr 0.250	ms/batch 7.16	loss 0.30
epoch 3	1400/ 2104 batches	lr 0.250	ms/batch 7.10	loss 0.28

epoch	3	1600/ 2104 batches	lr 0.250	ms/batch 7.08	loss 0.27	
epoch	3	1800/ 2104 batches	lr 0.250	ms/batch 7.03	loss 0.27	
epoch	3	2000/ 2104 batches	lr 0.250	ms/batch 7.26	loss 0.25	
-----						
end of epoch	3	time: 15.13s	valid loss 0.61	valid acc 0.814		
-----						
epoch	4	200/ 2104 batches	lr 0.250	ms/batch 7.36	loss 0.30	
epoch	4	400/ 2104 batches	lr 0.250	ms/batch 7.31	loss 0.27	
epoch	4	600/ 2104 batches	lr 0.250	ms/batch 7.28	loss 0.28	
epoch	4	800/ 2104 batches	lr 0.250	ms/batch 7.22	loss 0.27	
epoch	4	1000/ 2104 batches	lr 0.250	ms/batch 7.05	loss 0.27	
epoch	4	1200/ 2104 batches	lr 0.250	ms/batch 7.05	loss 0.28	
epoch	4	1400/ 2104 batches	lr 0.250	ms/batch 6.98	loss 0.25	
epoch	4	1600/ 2104 batches	lr 0.250	ms/batch 6.99	loss 0.25	
epoch	4	1800/ 2104 batches	lr 0.250	ms/batch 7.04	loss 0.25	
epoch	4	2000/ 2104 batches	lr 0.250	ms/batch 7.01	loss 0.23	
-----						
end of epoch	4	time: 15.05s	valid loss 0.65	valid acc 0.817		
-----						
epoch	5	200/ 2104 batches	lr 0.062	ms/batch 7.04	loss 0.27	
epoch	5	400/ 2104 batches	lr 0.062	ms/batch 7.05	loss 0.25	
epoch	5	600/ 2104 batches	lr 0.062	ms/batch 7.02	loss 0.26	
epoch	5	800/ 2104 batches	lr 0.062	ms/batch 7.02	loss 0.25	
epoch	5	1000/ 2104 batches	lr 0.062	ms/batch 7.00	loss 0.24	
epoch	5	1200/ 2104 batches	lr 0.062	ms/batch 6.97	loss 0.25	
epoch	5	1400/ 2104 batches	lr 0.062	ms/batch 6.99	loss 0.23	
epoch	5	1600/ 2104 batches	lr 0.062	ms/batch 7.02	loss 0.22	
epoch	5	1800/ 2104 batches	lr 0.062	ms/batch 7.02	loss 0.22	
epoch	5	2000/ 2104 batches	lr 0.062	ms/batch 7.35	loss 0.21	
-----						
end of epoch	5	time: 14.91s	valid loss 0.66	valid acc 0.819		
-----						
epoch	6	200/ 2104 batches	lr 0.016	ms/batch 7.33	loss 0.26	
epoch	6	400/ 2104 batches	lr 0.016	ms/batch 7.32	loss 0.24	
epoch	6	600/ 2104 batches	lr 0.016	ms/batch 7.26	loss 0.25	
epoch	6	800/ 2104 batches	lr 0.016	ms/batch 7.25	loss 0.24	
epoch	6	1000/ 2104 batches	lr 0.016	ms/batch 7.16	loss 0.23	
epoch	6	1200/ 2104 batches	lr 0.016	ms/batch 7.20	loss 0.25	
epoch	6	1400/ 2104 batches	lr 0.016	ms/batch 7.22	loss 0.22	
epoch	6	1600/ 2104 batches	lr 0.016	ms/batch 7.18	loss 0.21	
epoch	6	1800/ 2104 batches	lr 0.016	ms/batch 7.32	loss 0.22	
epoch	6	2000/ 2104 batches	lr 0.016	ms/batch 7.28	loss 0.20	
-----						
end of epoch	6	time: 15.33s	valid loss 0.65	valid acc 0.817		
-----						
epoch	7	200/ 2104 batches	lr 0.004	ms/batch 7.33	loss 0.26	
epoch	7	400/ 2104 batches	lr 0.004	ms/batch 7.40	loss 0.23	
epoch	7	600/ 2104 batches	lr 0.004	ms/batch 7.32	loss 0.25	
epoch	7	800/ 2104 batches	lr 0.004	ms/batch 7.28	loss 0.24	
epoch	7	1000/ 2104 batches	lr 0.004	ms/batch 7.30	loss 0.23	
epoch	7	1200/ 2104 batches	lr 0.004	ms/batch 7.30	loss 0.25	

epoch 7	1400/ 2104 batches	lr 0.004	ms/batch 7.40	loss 0.22
epoch 7	1600/ 2104 batches	lr 0.004	ms/batch 7.43	loss 0.21
epoch 7	1800/ 2104 batches	lr 0.004	ms/batch 6.90	loss 0.21
epoch 7	2000/ 2104 batches	lr 0.004	ms/batch 7.07	loss 0.20

-----  
| end of epoch 7 | time: 15.37s | valid loss 0.64 | valid acc 0.812 |

-----  
epoch 8	200/ 2104 batches	lr 0.001	ms/batch 7.34	loss 0.25
epoch 8	400/ 2104 batches	lr 0.001	ms/batch 7.28	loss 0.23
epoch 8	600/ 2104 batches	lr 0.001	ms/batch 7.38	loss 0.25
epoch 8	800/ 2104 batches	lr 0.001	ms/batch 7.45	loss 0.23
epoch 8	1000/ 2104 batches	lr 0.001	ms/batch 7.11	loss 0.23
epoch 8	1200/ 2104 batches	lr 0.001	ms/batch 7.17	loss 0.24
epoch 8	1400/ 2104 batches	lr 0.001	ms/batch 7.25	loss 0.22
epoch 8	1600/ 2104 batches	lr 0.001	ms/batch 7.47	loss 0.21
epoch 8	1800/ 2104 batches	lr 0.001	ms/batch 7.38	loss 0.21
epoch 8	2000/ 2104 batches	lr 0.001	ms/batch 7.31	loss 0.20

-----  
| end of epoch 8 | time: 15.45s | valid loss 0.65 | valid acc 0.817 |

-----  
epoch 9	200/ 2104 batches	lr 0.000	ms/batch 7.32	loss 0.25
epoch 9	400/ 2104 batches	lr 0.000	ms/batch 7.30	loss 0.23
epoch 9	600/ 2104 batches	lr 0.000	ms/batch 7.32	loss 0.25
epoch 9	800/ 2104 batches	lr 0.000	ms/batch 7.26	loss 0.23
epoch 9	1000/ 2104 batches	lr 0.000	ms/batch 7.25	loss 0.22
epoch 9	1200/ 2104 batches	lr 0.000	ms/batch 7.29	loss 0.24
epoch 9	1400/ 2104 batches	lr 0.000	ms/batch 7.12	loss 0.22
epoch 9	1600/ 2104 batches	lr 0.000	ms/batch 7.05	loss 0.21
epoch 9	1800/ 2104 batches	lr 0.000	ms/batch 7.18	loss 0.21
epoch 9	2000/ 2104 batches	lr 0.000	ms/batch 7.10	loss 0.20

-----  
| end of epoch 9 | time: 15.23s | valid loss 0.65 | valid acc 0.817 |

-----  
epoch 10	200/ 2104 batches	lr 0.000	ms/batch 7.01	loss 0.25
epoch 10	400/ 2104 batches	lr 0.000	ms/batch 6.99	loss 0.23
epoch 10	600/ 2104 batches	lr 0.000	ms/batch 7.05	loss 0.25
epoch 10	800/ 2104 batches	lr 0.000	ms/batch 7.10	loss 0.24
epoch 10	1000/ 2104 batches	lr 0.000	ms/batch 7.04	loss 0.22
epoch 10	1200/ 2104 batches	lr 0.000	ms/batch 6.98	loss 0.24
epoch 10	1400/ 2104 batches	lr 0.000	ms/batch 7.10	loss 0.22
epoch 10	1600/ 2104 batches	lr 0.000	ms/batch 7.00	loss 0.21
epoch 10	1800/ 2104 batches	lr 0.000	ms/batch 7.11	loss 0.21
epoch 10	2000/ 2104 batches	lr 0.000	ms/batch 7.02	loss 0.20

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| end of epoch 10 | time: 14.87s | valid loss 0.65 | valid acc 0.817 |

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| End of training | test loss 0.55 | test acc 0.850 |

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learning\_rate: 1, dropout: 0.2, batch\_size: 64  
-----

epoch 1	200/ 1052 batches	lr 1.000	ms/batch 8.60	loss 0.69
epoch 1	400/ 1052 batches	lr 1.000	ms/batch 7.26	loss 0.69
epoch 1	600/ 1052 batches	lr 1.000	ms/batch 7.49	loss 0.69
epoch 1	800/ 1052 batches	lr 1.000	ms/batch 7.49	loss 0.69
epoch 1	1000/ 1052 batches	lr 1.000	ms/batch 7.49	loss 0.69
-----

| end of epoch 1 | time: 8.12s | valid loss 0.69 | valid acc 0.557 |  
-----

epoch 2	200/ 1052 batches	lr 1.000	ms/batch 7.57	loss 0.67
epoch 2	400/ 1052 batches	lr 1.000	ms/batch 7.56	loss 0.63
epoch 2	600/ 1052 batches	lr 1.000	ms/batch 7.60	loss 0.58
epoch 2	800/ 1052 batches	lr 1.000	ms/batch 7.53	loss 0.53
epoch 2	1000/ 1052 batches	lr 1.000	ms/batch 7.53	loss 0.50
-----

| end of epoch 2 | time: 8.01s | valid loss 0.57 | valid acc 0.750 |  
-----

epoch 3	200/ 1052 batches	lr 1.000	ms/batch 7.48	loss 0.46
epoch 3	400/ 1052 batches	lr 1.000	ms/batch 7.22	loss 0.44
epoch 3	600/ 1052 batches	lr 1.000	ms/batch 7.24	loss 0.41
epoch 3	800/ 1052 batches	lr 1.000	ms/batch 7.31	loss 0.39
epoch 3	1000/ 1052 batches	lr 1.000	ms/batch 7.22	loss 0.37
-----

| end of epoch 3 | time: 7.75s | valid loss 0.55 | valid acc 0.798 |  
-----

epoch 4	200/ 1052 batches	lr 1.000	ms/batch 7.52	loss 0.36
epoch 4	400/ 1052 batches	lr 1.000	ms/batch 7.57	loss 0.35
epoch 4	600/ 1052 batches	lr 1.000	ms/batch 7.47	loss 0.34
epoch 4	800/ 1052 batches	lr 1.000	ms/batch 7.39	loss 0.32
epoch 4	1000/ 1052 batches	lr 1.000	ms/batch 7.45	loss 0.31
-----

| end of epoch 4 | time: 7.92s | valid loss 0.60 | valid acc 0.819 |  
-----

epoch 5	200/ 1052 batches	lr 0.250	ms/batch 7.30	loss 0.27
epoch 5	400/ 1052 batches	lr 0.250	ms/batch 7.45	loss 0.27
epoch 5	600/ 1052 batches	lr 0.250	ms/batch 7.41	loss 0.26
epoch 5	800/ 1052 batches	lr 0.250	ms/batch 7.41	loss 0.24
epoch 5	1000/ 1052 batches	lr 0.250	ms/batch 7.42	loss 0.23
-----

| end of epoch 5 | time: 7.84s | valid loss 0.60 | valid acc 0.812 |  
-----

epoch 6	200/ 1052 batches	lr 0.062	ms/batch 7.47	loss 0.25
epoch 6	400/ 1052 batches	lr 0.062	ms/batch 7.51	loss 0.24
epoch 6	600/ 1052 batches	lr 0.062	ms/batch 7.47	loss 0.23
epoch 6	800/ 1052 batches	lr 0.062	ms/batch 7.46	loss 0.22
epoch 6	1000/ 1052 batches	lr 0.062	ms/batch 7.51	loss 0.21
-----

| end of epoch 6 | time: 7.92s | valid loss 0.62 | valid acc 0.812 |  
-----

```
| epoch 7 | 200/ 1052 batches | lr 0.016 | ms/batch 7.56 | loss 0.24 |
| epoch 7 | 400/ 1052 batches | lr 0.016 | ms/batch 7.40 | loss 0.23 |
| epoch 7 | 600/ 1052 batches | lr 0.016 | ms/batch 7.46 | loss 0.23 |
| epoch 7 | 800/ 1052 batches | lr 0.016 | ms/batch 7.45 | loss 0.21 |
| epoch 7 | 1000/ 1052 batches | lr 0.016 | ms/batch 7.57 | loss 0.21 |
```

```
-----
| end of epoch 7 | time: 7.94s | valid loss 0.62 | valid acc 0.821 |
-----
```

```
| epoch 8 | 200/ 1052 batches | lr 0.004 | ms/batch 7.47 | loss 0.24 |
| epoch 8 | 400/ 1052 batches | lr 0.004 | ms/batch 7.51 | loss 0.24 |
| epoch 8 | 600/ 1052 batches | lr 0.004 | ms/batch 7.48 | loss 0.22 |
| epoch 8 | 800/ 1052 batches | lr 0.004 | ms/batch 7.25 | loss 0.21 |
| epoch 8 | 1000/ 1052 batches | lr 0.004 | ms/batch 7.27 | loss 0.21 |
```

```
-----
| end of epoch 8 | time: 7.84s | valid loss 0.62 | valid acc 0.819 |
-----
```

```
| epoch 9 | 200/ 1052 batches | lr 0.001 | ms/batch 7.54 | loss 0.24 |
| epoch 9 | 400/ 1052 batches | lr 0.001 | ms/batch 7.51 | loss 0.23 |
| epoch 9 | 600/ 1052 batches | lr 0.001 | ms/batch 7.55 | loss 0.22 |
| epoch 9 | 800/ 1052 batches | lr 0.001 | ms/batch 7.52 | loss 0.21 |
| epoch 9 | 1000/ 1052 batches | lr 0.001 | ms/batch 7.35 | loss 0.20 |
```

```
-----
| end of epoch 9 | time: 7.94s | valid loss 0.62 | valid acc 0.819 |
-----
```

```
| epoch 10 | 200/ 1052 batches | lr 0.000 | ms/batch 7.30 | loss 0.24 |
| epoch 10 | 400/ 1052 batches | lr 0.000 | ms/batch 7.27 | loss 0.23 |
| epoch 10 | 600/ 1052 batches | lr 0.000 | ms/batch 7.31 | loss 0.23 |
| epoch 10 | 800/ 1052 batches | lr 0.000 | ms/batch 7.33 | loss 0.21 |
| epoch 10 | 1000/ 1052 batches | lr 0.000 | ms/batch 7.51 | loss 0.20 |
```

```
-----
| end of epoch 10 | time: 7.79s | valid loss 0.62 | valid acc 0.817 |
-----
```

```
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```

```
| End of training | test loss 0.51 | test acc 0.810 |
```

```
=====
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```

```
-----
learning_rate: 10, dropout: 0.1, batch_size: 32
-----
```

```
| epoch 1 | 200/ 2104 batches | lr 10.000 | ms/batch 8.01 | loss 1.06 |
| epoch 1 | 400/ 2104 batches | lr 10.000 | ms/batch 7.38 | loss 1.04 |
| epoch 1 | 600/ 2104 batches | lr 10.000 | ms/batch 7.31 | loss 1.01 |
| epoch 1 | 800/ 2104 batches | lr 10.000 | ms/batch 7.40 | loss 1.02 |
| epoch 1 | 1000/ 2104 batches | lr 10.000 | ms/batch 7.32 | loss 1.02 |
| epoch 1 | 1200/ 2104 batches | lr 10.000 | ms/batch 7.29 | loss 1.03 |
| epoch 1 | 1400/ 2104 batches | lr 10.000 | ms/batch 7.27 | loss 1.04 |
| epoch 1 | 1600/ 2104 batches | lr 10.000 | ms/batch 7.42 | loss 1.01 |
| epoch 1 | 1800/ 2104 batches | lr 10.000 | ms/batch 7.39 | loss 1.03 |
| epoch 1 | 2000/ 2104 batches | lr 10.000 | ms/batch 7.43 | loss 1.05 |
-----
```

| end of epoch 1 | time: 15.65s | valid loss 1.10 | valid acc 0.483 |

---

epoch 2	200/ 2104 batches	lr 10.000	ms/batch 7.37	loss 1.04
epoch 2	400/ 2104 batches	lr 10.000	ms/batch 7.40	loss 1.04
epoch 2	600/ 2104 batches	lr 10.000	ms/batch 7.36	loss 1.01
epoch 2	800/ 2104 batches	lr 10.000	ms/batch 7.36	loss 1.02
epoch 2	1000/ 2104 batches	lr 10.000	ms/batch 7.34	loss 1.02
epoch 2	1200/ 2104 batches	lr 10.000	ms/batch 7.20	loss 1.02
epoch 2	1400/ 2104 batches	lr 10.000	ms/batch 7.05	loss 1.04
epoch 2	1600/ 2104 batches	lr 10.000	ms/batch 7.39	loss 1.01
epoch 2	1800/ 2104 batches	lr 10.000	ms/batch 7.33	loss 1.03
epoch 2	2000/ 2104 batches	lr 10.000	ms/batch 7.33	loss 1.04

---

| end of epoch 2 | time: 15.45s | valid loss 1.11 | valid acc 0.483 |

---

epoch 3	200/ 2104 batches	lr 2.500	ms/batch 7.32	loss 0.71
epoch 3	400/ 2104 batches	lr 2.500	ms/batch 7.01	loss 0.70
epoch 3	600/ 2104 batches	lr 2.500	ms/batch 7.08	loss 0.71
epoch 3	800/ 2104 batches	lr 2.500	ms/batch 7.10	loss 0.70
epoch 3	1000/ 2104 batches	lr 2.500	ms/batch 7.13	loss 0.70
epoch 3	1200/ 2104 batches	lr 2.500	ms/batch 7.05	loss 0.70
epoch 3	1400/ 2104 batches	lr 2.500	ms/batch 7.05	loss 0.70
epoch 3	1600/ 2104 batches	lr 2.500	ms/batch 7.17	loss 0.70
epoch 3	1800/ 2104 batches	lr 2.500	ms/batch 7.29	loss 0.70
epoch 3	2000/ 2104 batches	lr 2.500	ms/batch 7.37	loss 0.71

---

| end of epoch 3 | time: 15.14s | valid loss 0.69 | valid acc 0.605 |

---

epoch 4	200/ 2104 batches	lr 2.500	ms/batch 7.32	loss 0.67
epoch 4	400/ 2104 batches	lr 2.500	ms/batch 7.27	loss 0.60
epoch 4	600/ 2104 batches	lr 2.500	ms/batch 7.26	loss 0.55
epoch 4	800/ 2104 batches	lr 2.500	ms/batch 7.33	loss 0.51
epoch 4	1000/ 2104 batches	lr 2.500	ms/batch 7.38	loss 0.47
epoch 4	1200/ 2104 batches	lr 2.500	ms/batch 7.41	loss 0.45
epoch 4	1400/ 2104 batches	lr 2.500	ms/batch 7.37	loss 0.41
epoch 4	1600/ 2104 batches	lr 2.500	ms/batch 7.42	loss 0.38
epoch 4	1800/ 2104 batches	lr 2.500	ms/batch 7.37	loss 0.39
epoch 4	2000/ 2104 batches	lr 2.500	ms/batch 7.42	loss 0.35

---

| end of epoch 4 | time: 15.45s | valid loss 0.84 | valid acc 0.776 |

---

epoch 5	200/ 2104 batches	lr 0.625	ms/batch 6.02	loss 0.31
epoch 5	400/ 2104 batches	lr 0.625	ms/batch 7.32	loss 0.28
epoch 5	600/ 2104 batches	lr 0.625	ms/batch 7.41	loss 0.28
epoch 5	800/ 2104 batches	lr 0.625	ms/batch 7.42	loss 0.26
epoch 5	1000/ 2104 batches	lr 0.625	ms/batch 7.38	loss 0.25
epoch 5	1200/ 2104 batches	lr 0.625	ms/batch 7.11	loss 0.26
epoch 5	1400/ 2104 batches	lr 0.625	ms/batch 6.34	loss 0.23
epoch 5	1600/ 2104 batches	lr 0.625	ms/batch 7.22	loss 0.22
epoch 5	1800/ 2104 batches	lr 0.625	ms/batch 7.38	loss 0.23
epoch 5	2000/ 2104 batches	lr 0.625	ms/batch 7.38	loss 0.20

-----  
| end of epoch 5 | time: 15.03s | valid loss 0.58 | valid acc 0.812 |  
-----

epoch 6	200/ 2104 batches	lr 0.625	ms/batch 7.49	loss 0.25
epoch 6	400/ 2104 batches	lr 0.625	ms/batch 7.43	loss 0.23
epoch 6	600/ 2104 batches	lr 0.625	ms/batch 7.35	loss 0.23
epoch 6	800/ 2104 batches	lr 0.625	ms/batch 7.36	loss 0.23
epoch 6	1000/ 2104 batches	lr 0.625	ms/batch 7.20	loss 0.21
epoch 6	1200/ 2104 batches	lr 0.625	ms/batch 6.55	loss 0.22
epoch 6	1400/ 2104 batches	lr 0.625	ms/batch 6.68	loss 0.20
epoch 6	1600/ 2104 batches	lr 0.625	ms/batch 7.12	loss 0.19
epoch 6	1800/ 2104 batches	lr 0.625	ms/batch 7.13	loss 0.20
epoch 6	2000/ 2104 batches	lr 0.625	ms/batch 7.11	loss 0.19
-----

| end of epoch 6 | time: 15.09s | valid loss 0.57 | valid acc 0.810 |  
-----

epoch 7	200/ 2104 batches	lr 0.625	ms/batch 7.20	loss 0.22
epoch 7	400/ 2104 batches	lr 0.625	ms/batch 7.24	loss 0.21
epoch 7	600/ 2104 batches	lr 0.625	ms/batch 7.08	loss 0.20
epoch 7	800/ 2104 batches	lr 0.625	ms/batch 7.07	loss 0.20
epoch 7	1000/ 2104 batches	lr 0.625	ms/batch 7.31	loss 0.18
epoch 7	1200/ 2104 batches	lr 0.625	ms/batch 7.25	loss 0.20
epoch 7	1400/ 2104 batches	lr 0.625	ms/batch 7.15	loss 0.18
epoch 7	1600/ 2104 batches	lr 0.625	ms/batch 7.32	loss 0.17
epoch 7	1800/ 2104 batches	lr 0.625	ms/batch 7.18	loss 0.19
epoch 7	2000/ 2104 batches	lr 0.625	ms/batch 7.18	loss 0.17
-----

| end of epoch 7 | time: 15.20s | valid loss 0.58 | valid acc 0.826 |  
-----

epoch 8	200/ 2104 batches	lr 0.156	ms/batch 7.46	loss 0.20
epoch 8	400/ 2104 batches	lr 0.156	ms/batch 7.40	loss 0.18
epoch 8	600/ 2104 batches	lr 0.156	ms/batch 7.21	loss 0.18
epoch 8	800/ 2104 batches	lr 0.156	ms/batch 7.06	loss 0.18
epoch 8	1000/ 2104 batches	lr 0.156	ms/batch 7.17	loss 0.15
epoch 8	1200/ 2104 batches	lr 0.156	ms/batch 7.11	loss 0.17
epoch 8	1400/ 2104 batches	lr 0.156	ms/batch 7.11	loss 0.14
epoch 8	1600/ 2104 batches	lr 0.156	ms/batch 7.06	loss 0.14
epoch 8	1800/ 2104 batches	lr 0.156	ms/batch 7.05	loss 0.15
epoch 8	2000/ 2104 batches	lr 0.156	ms/batch 7.24	loss 0.14
-----

| end of epoch 8 | time: 15.18s | valid loss 0.58 | valid acc 0.845 |  
-----

epoch 9	200/ 2104 batches	lr 0.039	ms/batch 7.22	loss 0.19
epoch 9	400/ 2104 batches	lr 0.039	ms/batch 7.20	loss 0.17
epoch 9	600/ 2104 batches	lr 0.039	ms/batch 7.27	loss 0.17
epoch 9	800/ 2104 batches	lr 0.039	ms/batch 7.27	loss 0.17
epoch 9	1000/ 2104 batches	lr 0.039	ms/batch 7.03	loss 0.14
epoch 9	1200/ 2104 batches	lr 0.039	ms/batch 7.27	loss 0.16
epoch 9	1400/ 2104 batches	lr 0.039	ms/batch 7.16	loss 0.14
epoch 9	1600/ 2104 batches	lr 0.039	ms/batch 7.22	loss 0.13
epoch 9	1800/ 2104 batches	lr 0.039	ms/batch 7.18	loss 0.14

| epoch 9 | 2000/ 2104 batches | lr 0.039 | ms/batch 7.18 | loss 0.13 |

| end of epoch 9 | time: 15.21s | valid loss 0.58 | valid acc 0.845 |

| epoch 10 | 200/ 2104 batches | lr 0.010 | ms/batch 7.30 | loss 0.19 |

| epoch 10 | 400/ 2104 batches | lr 0.010 | ms/batch 7.08 | loss 0.17 |

| epoch 10 | 600/ 2104 batches | lr 0.010 | ms/batch 7.37 | loss 0.17 |

| epoch 10 | 800/ 2104 batches | lr 0.010 | ms/batch 7.16 | loss 0.17 |

| epoch 10 | 1000/ 2104 batches | lr 0.010 | ms/batch 7.17 | loss 0.14 |

| epoch 10 | 1200/ 2104 batches | lr 0.010 | ms/batch 7.06 | loss 0.16 |

| epoch 10 | 1400/ 2104 batches | lr 0.010 | ms/batch 7.26 | loss 0.13 |

| epoch 10 | 1600/ 2104 batches | lr 0.010 | ms/batch 7.23 | loss 0.12 |

| epoch 10 | 1800/ 2104 batches | lr 0.010 | ms/batch 7.09 | loss 0.14 |

| epoch 10 | 2000/ 2104 batches | lr 0.010 | ms/batch 7.09 | loss 0.13 |

| end of epoch 10 | time: 15.17s | valid loss 0.57 | valid acc 0.845 |

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| End of training | test loss 0.50 | test acc 0.850 |  
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learning\_rate: 10, dropout: 0.1, batch\_size: 64

| epoch 1 | 200/ 1052 batches | lr 10.000 | ms/batch 8.75 | loss 1.07 |

| epoch 1 | 400/ 1052 batches | lr 10.000 | ms/batch 7.21 | loss 1.02 |

| epoch 1 | 600/ 1052 batches | lr 10.000 | ms/batch 7.51 | loss 1.03 |

| epoch 1 | 800/ 1052 batches | lr 10.000 | ms/batch 7.55 | loss 1.03 |

| epoch 1 | 1000/ 1052 batches | lr 10.000 | ms/batch 7.64 | loss 1.03 |

| end of epoch 1 | time: 8.17s | valid loss 1.17 | valid acc 0.540 |

| epoch 2 | 200/ 1052 batches | lr 10.000 | ms/batch 7.66 | loss 1.05 |

| epoch 2 | 400/ 1052 batches | lr 10.000 | ms/batch 7.64 | loss 1.03 |

| epoch 2 | 600/ 1052 batches | lr 10.000 | ms/batch 7.60 | loss 1.04 |

| epoch 2 | 800/ 1052 batches | lr 10.000 | ms/batch 7.54 | loss 1.03 |

| epoch 2 | 1000/ 1052 batches | lr 10.000 | ms/batch 7.58 | loss 1.03 |

| end of epoch 2 | time: 8.05s | valid loss 1.29 | valid acc 0.540 |

| epoch 3 | 200/ 1052 batches | lr 2.500 | ms/batch 7.61 | loss 0.71 |

| epoch 3 | 400/ 1052 batches | lr 2.500 | ms/batch 7.61 | loss 0.70 |

| epoch 3 | 600/ 1052 batches | lr 2.500 | ms/batch 7.56 | loss 0.69 |

| epoch 3 | 800/ 1052 batches | lr 2.500 | ms/batch 7.58 | loss 0.69 |

| epoch 3 | 1000/ 1052 batches | lr 2.500 | ms/batch 7.55 | loss 0.70 |

| end of epoch 3 | time: 8.04s | valid loss 0.73 | valid acc 0.540 |

| epoch 4 | 200/ 1052 batches | lr 2.500 | ms/batch 7.69 | loss 0.70 |

| epoch 4 | 400/ 1052 batches | lr 2.500 | ms/batch 7.53 | loss 0.70 |

epoch	4		600/ 1052 batches		lr 2.500		ms/batch 7.55		loss 0.69	
epoch	4		800/ 1052 batches		lr 2.500		ms/batch 7.52		loss 0.68	
epoch	4		1000/ 1052 batches		lr 2.500		ms/batch 7.53		loss 0.63	
-----										
end of epoch	4		time: 8.01s		valid loss 0.83		valid acc 0.650			
-----										
epoch	5		200/ 1052 batches		lr 0.625		ms/batch 6.44		loss 0.47	
epoch	5		400/ 1052 batches		lr 0.625		ms/batch 6.66		loss 0.44	
epoch	5		600/ 1052 batches		lr 0.625		ms/batch 7.48		loss 0.41	
epoch	5		800/ 1052 batches		lr 0.625		ms/batch 7.41		loss 0.38	
epoch	5		1000/ 1052 batches		lr 0.625		ms/batch 7.48		loss 0.34	
-----										
end of epoch	5		time: 7.56s		valid loss 0.56		valid acc 0.788			
-----										
epoch	6		200/ 1052 batches		lr 0.625		ms/batch 7.55		loss 0.35	
epoch	6		400/ 1052 batches		lr 0.625		ms/batch 7.53		loss 0.35	
epoch	6		600/ 1052 batches		lr 0.625		ms/batch 7.51		loss 0.33	
epoch	6		800/ 1052 batches		lr 0.625		ms/batch 7.56		loss 0.31	
epoch	6		1000/ 1052 batches		lr 0.625		ms/batch 6.53		loss 0.29	
-----										
end of epoch	6		time: 7.79s		valid loss 0.56		valid acc 0.798			
-----										
epoch	7		200/ 1052 batches		lr 0.156		ms/batch 7.44		loss 0.28	
epoch	7		400/ 1052 batches		lr 0.156		ms/batch 5.87		loss 0.28	
epoch	7		600/ 1052 batches		lr 0.156		ms/batch 6.97		loss 0.26	
epoch	7		800/ 1052 batches		lr 0.156		ms/batch 7.50		loss 0.25	
epoch	7		1000/ 1052 batches		lr 0.156		ms/batch 7.58		loss 0.23	
-----										
end of epoch	7		time: 7.53s		valid loss 0.59		valid acc 0.819			
-----										
epoch	8		200/ 1052 batches		lr 0.039		ms/batch 7.60		loss 0.26	
epoch	8		400/ 1052 batches		lr 0.039		ms/batch 7.61		loss 0.26	
epoch	8		600/ 1052 batches		lr 0.039		ms/batch 7.49		loss 0.25	
epoch	8		800/ 1052 batches		lr 0.039		ms/batch 7.56		loss 0.23	
epoch	8		1000/ 1052 batches		lr 0.039		ms/batch 7.62		loss 0.22	
-----										
end of epoch	8		time: 8.03s		valid loss 0.59		valid acc 0.812			
-----										
epoch	9		200/ 1052 batches		lr 0.010		ms/batch 7.61		loss 0.25	
epoch	9		400/ 1052 batches		lr 0.010		ms/batch 7.66		loss 0.25	
epoch	9		600/ 1052 batches		lr 0.010		ms/batch 7.68		loss 0.24	
epoch	9		800/ 1052 batches		lr 0.010		ms/batch 7.58		loss 0.22	
epoch	9		1000/ 1052 batches		lr 0.010		ms/batch 7.62		loss 0.21	
-----										
end of epoch	9		time: 8.09s		valid loss 0.59		valid acc 0.812			
-----										
epoch	10		200/ 1052 batches		lr 0.002		ms/batch 7.63		loss 0.25	
epoch	10		400/ 1052 batches		lr 0.002		ms/batch 7.30		loss 0.25	
epoch	10		600/ 1052 batches		lr 0.002		ms/batch 7.31		loss 0.24	
epoch	10		800/ 1052 batches		lr 0.002		ms/batch 7.31		loss 0.22	
epoch	10		1000/ 1052 batches		lr 0.002		ms/batch 7.44		loss 0.21	

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| end of epoch 10 | time: 7.86s | valid loss 0.59 | valid acc 0.812 |  
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| End of training | test loss 0.53 | test acc 0.821 |  
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learning\_rate: 10, dropout: 0.2, batch\_size: 32  
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epoch 1	200/ 2104 batches	lr 10.000	ms/batch 8.23	loss 1.05
epoch 1	400/ 2104 batches	lr 10.000	ms/batch 7.06	loss 1.03
epoch 1	600/ 2104 batches	lr 10.000	ms/batch 7.07	loss 1.01
epoch 1	800/ 2104 batches	lr 10.000	ms/batch 7.23	loss 1.02
epoch 1	1000/ 2104 batches	lr 10.000	ms/batch 5.73	loss 1.02
epoch 1	1200/ 2104 batches	lr 10.000	ms/batch 6.51	loss 1.03
epoch 1	1400/ 2104 batches	lr 10.000	ms/batch 7.33	loss 1.02
epoch 1	1600/ 2104 batches	lr 10.000	ms/batch 7.24	loss 1.02
epoch 1	1800/ 2104 batches	lr 10.000	ms/batch 7.21	loss 1.03
epoch 1	2000/ 2104 batches	lr 10.000	ms/batch 7.33	loss 1.04
-----

| end of epoch 1 | time: 15.00s | valid loss 1.13 | valid acc 0.483 |  
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epoch 2	200/ 2104 batches	lr 10.000	ms/batch 5.76	loss 1.02
epoch 2	400/ 2104 batches	lr 10.000	ms/batch 6.82	loss 1.01
epoch 2	600/ 2104 batches	lr 10.000	ms/batch 7.29	loss 1.02
epoch 2	800/ 2104 batches	lr 10.000	ms/batch 7.27	loss 1.02
epoch 2	1000/ 2104 batches	lr 10.000	ms/batch 7.22	loss 1.02
epoch 2	1200/ 2104 batches	lr 10.000	ms/batch 7.25	loss 1.02
epoch 2	1400/ 2104 batches	lr 10.000	ms/batch 7.33	loss 1.02
epoch 2	1600/ 2104 batches	lr 10.000	ms/batch 7.45	loss 1.02
epoch 2	1800/ 2104 batches	lr 10.000	ms/batch 7.33	loss 1.03
epoch 2	2000/ 2104 batches	lr 10.000	ms/batch 7.38	loss 1.04
-----

| end of epoch 2 | time: 14.98s | valid loss 1.12 | valid acc 0.483 |  
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epoch 3	200/ 2104 batches	lr 10.000	ms/batch 7.08	loss 1.01
epoch 3	400/ 2104 batches	lr 10.000	ms/batch 7.11	loss 1.03
epoch 3	600/ 2104 batches	lr 10.000	ms/batch 7.18	loss 1.02
epoch 3	800/ 2104 batches	lr 10.000	ms/batch 7.22	loss 1.02
epoch 3	1000/ 2104 batches	lr 10.000	ms/batch 7.20	loss 1.02
epoch 3	1200/ 2104 batches	lr 10.000	ms/batch 7.20	loss 1.03
epoch 3	1400/ 2104 batches	lr 10.000	ms/batch 7.09	loss 1.02
epoch 3	1600/ 2104 batches	lr 10.000	ms/batch 7.16	loss 1.01
epoch 3	1800/ 2104 batches	lr 10.000	ms/batch 7.12	loss 1.03
epoch 3	2000/ 2104 batches	lr 10.000	ms/batch 7.15	loss 1.04
-----

| end of epoch 3 | time: 15.11s | valid loss 1.09 | valid acc 0.483 |  
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| epoch 4 | 200/ 2104 batches | lr 10.000 | ms/batch 7.29 | loss 1.04 |

epoch	4		400/ 2104 batches		lr 10.000		ms/batch 7.25		loss 1.02	
epoch	4		600/ 2104 batches		lr 10.000		ms/batch 7.19		loss 1.03	
epoch	4		800/ 2104 batches		lr 10.000		ms/batch 7.12		loss 1.02	
epoch	4		1000/ 2104 batches		lr 10.000		ms/batch 7.27		loss 1.00	
epoch	4		1200/ 2104 batches		lr 10.000		ms/batch 7.33		loss 1.03	
epoch	4		1400/ 2104 batches		lr 10.000		ms/batch 7.38		loss 1.02	
epoch	4		1600/ 2104 batches		lr 10.000		ms/batch 7.35		loss 1.02	
epoch	4		1800/ 2104 batches		lr 10.000		ms/batch 7.35		loss 1.03	
epoch	4		2000/ 2104 batches		lr 10.000		ms/batch 7.25		loss 1.04	

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| end of epoch 4 | time: 15.36s | valid loss 0.99 | valid acc 0.483 |  
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epoch	5		200/ 2104 batches		lr 10.000		ms/batch 7.17		loss 1.01	
epoch	5		400/ 2104 batches		lr 10.000		ms/batch 7.06		loss 1.02	
epoch	5		600/ 2104 batches		lr 10.000		ms/batch 7.32		loss 1.04	
epoch	5		800/ 2104 batches		lr 10.000		ms/batch 7.35		loss 1.02	
epoch	5		1000/ 2104 batches		lr 10.000		ms/batch 7.47		loss 1.02	
epoch	5		1200/ 2104 batches		lr 10.000		ms/batch 7.41		loss 1.02	
epoch	5		1400/ 2104 batches		lr 10.000		ms/batch 7.29		loss 1.02	
epoch	5		1600/ 2104 batches		lr 10.000		ms/batch 7.33		loss 1.01	
epoch	5		1800/ 2104 batches		lr 10.000		ms/batch 7.32		loss 1.04	
epoch	5		2000/ 2104 batches		lr 10.000		ms/batch 7.37		loss 1.05	

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| end of epoch 5 | time: 15.44s | valid loss 0.99 | valid acc 0.483 |  
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epoch	6		200/ 2104 batches		lr 2.500		ms/batch 6.70		loss 0.71	
epoch	6		400/ 2104 batches		lr 2.500		ms/batch 7.27		loss 0.70	
epoch	6		600/ 2104 batches		lr 2.500		ms/batch 7.31		loss 0.71	
epoch	6		800/ 2104 batches		lr 2.500		ms/batch 7.10		loss 0.70	
epoch	6		1000/ 2104 batches		lr 2.500		ms/batch 7.14		loss 0.70	
epoch	6		1200/ 2104 batches		lr 2.500		ms/batch 7.05		loss 0.70	
epoch	6		1400/ 2104 batches		lr 2.500		ms/batch 7.05		loss 0.70	
epoch	6		1600/ 2104 batches		lr 2.500		ms/batch 7.08		loss 0.70	
epoch	6		1800/ 2104 batches		lr 2.500		ms/batch 7.07		loss 0.68	
epoch	6		2000/ 2104 batches		lr 2.500		ms/batch 7.04		loss 0.63	

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| end of epoch 6 | time: 14.96s | valid loss 0.67 | valid acc 0.683 |  
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epoch	7		200/ 2104 batches		lr 2.500		ms/batch 6.81		loss 0.54	
epoch	7		400/ 2104 batches		lr 2.500		ms/batch 7.35		loss 0.49	
epoch	7		600/ 2104 batches		lr 2.500		ms/batch 7.33		loss 0.48	
epoch	7		800/ 2104 batches		lr 2.500		ms/batch 7.09		loss 0.45	
epoch	7		1000/ 2104 batches		lr 2.500		ms/batch 7.19		loss 0.43	
epoch	7		1200/ 2104 batches		lr 2.500		ms/batch 7.41		loss 0.41	
epoch	7		1400/ 2104 batches		lr 2.500		ms/batch 7.28		loss 0.38	
epoch	7		1600/ 2104 batches		lr 2.500		ms/batch 7.33		loss 0.36	
epoch	7		1800/ 2104 batches		lr 2.500		ms/batch 7.33		loss 0.35	
epoch	7		2000/ 2104 batches		lr 2.500		ms/batch 7.33		loss 0.32	

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| end of epoch 7 | time: 15.30s | valid loss 0.67 | valid acc 0.810 |  
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epoch	8		200/ 2104 batches		lr 0.625		ms/batch 7.16		loss 0.29	
epoch	8		400/ 2104 batches		lr 0.625		ms/batch 7.13		loss 0.27	
epoch	8		600/ 2104 batches		lr 0.625		ms/batch 7.35		loss 0.27	
epoch	8		800/ 2104 batches		lr 0.625		ms/batch 7.12		loss 0.25	
epoch	8		1000/ 2104 batches		lr 0.625		ms/batch 7.03		loss 0.24	
epoch	8		1200/ 2104 batches		lr 0.625		ms/batch 7.13		loss 0.25	
epoch	8		1400/ 2104 batches		lr 0.625		ms/batch 7.23		loss 0.22	
epoch	8		1600/ 2104 batches		lr 0.625		ms/batch 7.36		loss 0.21	
epoch	8		1800/ 2104 batches		lr 0.625		ms/batch 7.34		loss 0.21	
epoch	8		2000/ 2104 batches		lr 0.625		ms/batch 7.28		loss 0.19	

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| end of epoch 8 | time: 15.26s | valid loss 0.65 | valid acc 0.805 |  
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epoch	9		200/ 2104 batches		lr 0.625		ms/batch 6.68		loss 0.25	
epoch	9		400/ 2104 batches		lr 0.625		ms/batch 7.34		loss 0.23	
epoch	9		600/ 2104 batches		lr 0.625		ms/batch 7.32		loss 0.22	
epoch	9		800/ 2104 batches		lr 0.625		ms/batch 6.71		loss 0.22	
epoch	9		1000/ 2104 batches		lr 0.625		ms/batch 7.19		loss 0.20	
epoch	9		1200/ 2104 batches		lr 0.625		ms/batch 7.11		loss 0.22	
epoch	9		1400/ 2104 batches		lr 0.625		ms/batch 7.33		loss 0.19	
epoch	9		1600/ 2104 batches		lr 0.625		ms/batch 7.29		loss 0.19	
epoch	9		1800/ 2104 batches		lr 0.625		ms/batch 7.13		loss 0.19	
epoch	9		2000/ 2104 batches		lr 0.625		ms/batch 7.21		loss 0.17	

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| end of epoch 9 | time: 15.07s | valid loss 0.61 | valid acc 0.821 |  
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epoch	10		200/ 2104 batches		lr 0.625		ms/batch 7.26		loss 0.22	
epoch	10		400/ 2104 batches		lr 0.625		ms/batch 7.18		loss 0.20	
epoch	10		600/ 2104 batches		lr 0.625		ms/batch 7.17		loss 0.20	
epoch	10		800/ 2104 batches		lr 0.625		ms/batch 7.19		loss 0.20	
epoch	10		1000/ 2104 batches		lr 0.625		ms/batch 7.15		loss 0.18	
epoch	10		1200/ 2104 batches		lr 0.625		ms/batch 7.16		loss 0.20	
epoch	10		1400/ 2104 batches		lr 0.625		ms/batch 7.22		loss 0.17	
epoch	10		1600/ 2104 batches		lr 0.625		ms/batch 7.22		loss 0.17	
epoch	10		1800/ 2104 batches		lr 0.625		ms/batch 7.31		loss 0.18	
epoch	10		2000/ 2104 batches		lr 0.625		ms/batch 7.31		loss 0.17	

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| end of epoch 10 | time: 15.25s | valid loss 0.58 | valid acc 0.826 |  
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| End of training | test loss 0.50 | test acc 0.819 |

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learning\_rate: 10, dropout: 0.2, batch\_size: 64  
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epoch	1		200/ 1052 batches		lr 10.000		ms/batch 8.82		loss 1.06	
epoch	1		400/ 1052 batches		lr 10.000		ms/batch 7.40		loss 1.02	
epoch	1		600/ 1052 batches		lr 10.000		ms/batch 7.40		loss 1.04	
epoch	1		800/ 1052 batches		lr 10.000		ms/batch 7.17		loss 1.03	

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| epoch  1 | 1000/ 1052 batches | lr 10.000 | ms/batch 7.28 | loss 1.03 |
-----
| end of epoch  1 | time: 8.05s | valid loss 1.18 | valid acc  0.540 |
-----
| epoch  2 | 200/ 1052 batches | lr 10.000 | ms/batch 7.45 | loss 1.05 |
| epoch  2 | 400/ 1052 batches | lr 10.000 | ms/batch 7.24 | loss 1.03 |
| epoch  2 | 600/ 1052 batches | lr 10.000 | ms/batch 7.23 | loss 1.04 |
| epoch  2 | 800/ 1052 batches | lr 10.000 | ms/batch 7.23 | loss 1.03 |
| epoch  2 | 1000/ 1052 batches | lr 10.000 | ms/batch 7.35 | loss 1.03 |
-----
| end of epoch  2 | time: 7.73s | valid loss 1.24 | valid acc  0.540 |
-----
| epoch  3 | 200/ 1052 batches | lr 2.500 | ms/batch 7.36 | loss 0.71 |
| epoch  3 | 400/ 1052 batches | lr 2.500 | ms/batch 7.52 | loss 0.70 |
| epoch  3 | 600/ 1052 batches | lr 2.500 | ms/batch 7.54 | loss 0.69 |
| epoch  3 | 800/ 1052 batches | lr 2.500 | ms/batch 7.41 | loss 0.69 |
| epoch  3 | 1000/ 1052 batches | lr 2.500 | ms/batch 7.46 | loss 0.70 |
-----
| end of epoch  3 | time: 7.90s | valid loss 0.73 | valid acc  0.540 |
-----
| epoch  4 | 200/ 1052 batches | lr 2.500 | ms/batch 7.49 | loss 0.70 |
| epoch  4 | 400/ 1052 batches | lr 2.500 | ms/batch 7.57 | loss 0.70 |
| epoch  4 | 600/ 1052 batches | lr 2.500 | ms/batch 7.51 | loss 0.69 |
| epoch  4 | 800/ 1052 batches | lr 2.500 | ms/batch 7.50 | loss 0.68 |
| epoch  4 | 1000/ 1052 batches | lr 2.500 | ms/batch 6.81 | loss 0.62 |
-----
| end of epoch  4 | time: 7.78s | valid loss 0.63 | valid acc  0.693 |
-----
| epoch  5 | 200/ 1052 batches | lr 2.500 | ms/batch 7.25 | loss 0.53 |
| epoch  5 | 400/ 1052 batches | lr 2.500 | ms/batch 7.40 | loss 0.49 |
| epoch  5 | 600/ 1052 batches | lr 2.500 | ms/batch 7.54 | loss 0.44 |
| epoch  5 | 800/ 1052 batches | lr 2.500 | ms/batch 7.60 | loss 0.40 |
| epoch  5 | 1000/ 1052 batches | lr 2.500 | ms/batch 7.43 | loss 0.38 |
-----
| end of epoch  5 | time: 7.87s | valid loss 0.62 | valid acc  0.790 |
-----
| epoch  6 | 200/ 1052 batches | lr 2.500 | ms/batch 7.74 | loss 0.35 |
| epoch  6 | 400/ 1052 batches | lr 2.500 | ms/batch 7.42 | loss 0.34 |
| epoch  6 | 600/ 1052 batches | lr 2.500 | ms/batch 7.44 | loss 0.31 |
| epoch  6 | 800/ 1052 batches | lr 2.500 | ms/batch 7.57 | loss 0.29 |
| epoch  6 | 1000/ 1052 batches | lr 2.500 | ms/batch 7.47 | loss 0.28 |
-----
| end of epoch  6 | time: 8.00s | valid loss 0.58 | valid acc  0.810 |
-----
| epoch  7 | 200/ 1052 batches | lr 2.500 | ms/batch 7.42 | loss 0.27 |
| epoch  7 | 400/ 1052 batches | lr 2.500 | ms/batch 7.59 | loss 0.26 |
| epoch  7 | 600/ 1052 batches | lr 2.500 | ms/batch 7.43 | loss 0.25 |
| epoch  7 | 800/ 1052 batches | lr 2.500 | ms/batch 7.38 | loss 0.22 |
| epoch  7 | 1000/ 1052 batches | lr 2.500 | ms/batch 7.23 | loss 0.23 |
-----
| end of epoch  7 | time: 7.85s | valid loss 0.57 | valid acc  0.831 |
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epoch 8	200/ 1052 batches	lr 2.500	ms/batch 7.29	loss 0.23
epoch 8	400/ 1052 batches	lr 2.500	ms/batch 7.28	loss 0.21
epoch 8	600/ 1052 batches	lr 2.500	ms/batch 7.24	loss 0.20
epoch 8	800/ 1052 batches	lr 2.500	ms/batch 7.29	loss 0.19
epoch 8	1000/ 1052 batches	lr 2.500	ms/batch 7.24	loss 0.19
-----

| end of epoch 8 | time: 7.71s | valid loss 0.59 | valid acc 0.843 |  
-----

epoch 9	200/ 1052 batches	lr 0.625	ms/batch 7.33	loss 0.18
epoch 9	400/ 1052 batches	lr 0.625	ms/batch 7.27	loss 0.16
epoch 9	600/ 1052 batches	lr 0.625	ms/batch 7.34	loss 0.15
epoch 9	800/ 1052 batches	lr 0.625	ms/batch 7.32	loss 0.12
epoch 9	1000/ 1052 batches	lr 0.625	ms/batch 7.39	loss 0.13
-----

| end of epoch 9 | time: 7.78s | valid loss 0.61 | valid acc 0.845 |  
-----

epoch 10	200/ 1052 batches	lr 0.156	ms/batch 7.49	loss 0.15
epoch 10	400/ 1052 batches	lr 0.156	ms/batch 7.50	loss 0.14
epoch 10	600/ 1052 batches	lr 0.156	ms/batch 7.57	loss 0.13
epoch 10	800/ 1052 batches	lr 0.156	ms/batch 7.61	loss 0.10
epoch 10	1000/ 1052 batches	lr 0.156	ms/batch 7.53	loss 0.10
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| end of epoch 10 | time: 7.97s | valid loss 0.65 | valid acc 0.850 |  
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| End of training | test loss 0.51 | test acc 0.845 |  
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