Deep learning practice course report
practice#4

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- Table1

	BinaryCrossentropy	MeanSquaredError
Accuracy(with train set)	88.8%	80.5%
Accuracy(with test set)	86%	76%

Result: BCE is better than MSE

- Table2

	SGD result	RMSProp	Adam
Accuracy (with train set)	86%	98.8%	99%
Accuracy (with test set)	84%	100%	100%
Train time[sec]	5.47s	6.05s	5.96s
Inference(test) time[sec]	0.0073s	0.0073s	0.0117s
Loss type	BCE	BCE	BCE

- Table 3

	Python Result (in practice#3)	Best result (CPU version)	Best result (GPU version)
Accuracy (with train set)	94.7%	99%	99%
Accuracy (with test set)	95.6%	100%	100%
Train time[sec]	0.2435s	5.96s	4.77s
Inference(test) time[sec]	0.00007s	0.0117s	0.1925s
Loss type	BCE	BCE	BCE
Optimizer type	Batch Gradient Descent	Adam	RMSProp

- Table 4

	Mini-batch = 1	Mini-batch = 32	Mini-batch = 128	Mini-batch = 1000
Accuracy (with train set)	97%	99%	99%	99%
Accuracy (with test set)	100%	100%	100%	100%
Train time[sec]	142.9962s	11.4657s	4.8s	4.77s
Inference(test) time[sec]	0.0294s	0.0341s	0.0299s	0.1925s
Loss type	BCE	BCE	BCE	BCE
Optimizer type	RMSProp	RMSProp	RMSProp	RMSProp