**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:2.6671**

**testing time:0.0892**

**training accuracy:0.98000**

**testing accuracy(e1):0.75900**

**testing accuracy(e2):0.92400**

**testing accuracy(e3):0.97000**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99100**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:5.0897**

**testing time:0.0467**

**training accuracy:0.98500**

**testing accuracy(e1):0.76700**

**testing accuracy(e2):0.91700**

**testing accuracy(e3):0.97000**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:11.8631**

**testing time:0.0532**

**training accuracy:0.99900**

**testing accuracy(e1):0.76400**

**testing accuracy(e2):0.92800**

**testing accuracy(e3):0.97300**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:25.5901**

**testing time:0.0772**

**training accuracy:0.94600**

**testing accuracy(e1):0.71800**

**testing accuracy(e2):0.89000**

**testing accuracy(e3):0.94900**

**testing accuracy(e4):0.97900**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:3.2324**

**testing time:0.0377**

**training accuracy:0.99900**

**testing accuracy(e1):0.78100**

**testing accuracy(e2):0.93400**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:9.0161**

**testing time:0.0448**

**training accuracy:1.00000**

**testing accuracy(e1):0.78500**

**testing accuracy(e2):0.93500**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.98700**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:21.5642**

**testing time:0.0550**

**training accuracy:1.00000**

**testing accuracy(e1):0.78400**

**testing accuracy(e2):0.93700**

**testing accuracy(e3):0.97500**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:50.0525**

**testing time:0.0820**

**training accuracy:1.00000**

**testing accuracy(e1):0.77400**

**testing accuracy(e2):0.92100**

**testing accuracy(e3):0.97500**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:4.6929**

**testing time:0.0367**

**training accuracy:1.00000**

**testing accuracy(e1):0.77200**

**testing accuracy(e2):0.93100**

**testing accuracy(e3):0.97300**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:13.3067**

**testing time:0.0434**

**training accuracy:1.00000**

**testing accuracy(e1):0.77700**

**testing accuracy(e2):0.92000**

**testing accuracy(e3):0.97500**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:31.8685**

**testing time:0.0516**

**training accuracy:1.00000**

**testing accuracy(e1):0.78900**

**testing accuracy(e2):0.91700**

**testing accuracy(e3):0.97200**

**testing accuracy(e4):0.98700**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:74.4757**

**testing time:0.0772**

**training accuracy:1.00000**

**testing accuracy(e1):0.78600**

**testing accuracy(e2):0.93400**

**testing accuracy(e3):0.97700**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:6.2141**

**testing time:0.0377**

**training accuracy:1.00000**

**testing accuracy(e1):0.76400**

**testing accuracy(e2):0.93200**

**testing accuracy(e3):0.97500**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:17.5789**

**testing time:0.0415**

**training accuracy:1.00000**

**testing accuracy(e1):0.77600**

**testing accuracy(e2):0.92600**

**testing accuracy(e3):0.97300**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:42.6749**

**testing time:0.0508**

**training accuracy:1.00000**

**testing accuracy(e1):0.77700**

**testing accuracy(e2):0.92500**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:98.3880**

**testing time:0.0725**

**training accuracy:1.00000**

**testing accuracy(e1):0.79100**

**testing accuracy(e2):0.92500**

**testing accuracy(e3):0.97900**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:1.5019**

**testing time:0.0396**

**training accuracy:0.93300**

**testing accuracy(e1):0.75000**

**testing accuracy(e2):0.91100**

**testing accuracy(e3):0.96100**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99200**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:4.4862**

**testing time:0.0421**

**training accuracy:0.98600**

**testing accuracy(e1):0.77900**

**testing accuracy(e2):0.93900**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:10.7443**

**testing time:0.0509**

**training accuracy:0.99200**

**testing accuracy(e1):0.77500**

**testing accuracy(e2):0.93200**

**testing accuracy(e3):0.97900**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:24.6643**

**testing time:0.0741**

**training accuracy:0.99100**

**testing accuracy(e1):0.77100**

**testing accuracy(e2):0.91800**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:2.7254**

**testing time:0.0368**

**training accuracy:0.99600**

**testing accuracy(e1):0.76100**

**testing accuracy(e2):0.92800**

**testing accuracy(e3):0.97400**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:8.5350**

**testing time:0.0418**

**training accuracy:1.00000**

**testing accuracy(e1):0.76600**

**testing accuracy(e2):0.92500**

**testing accuracy(e3):0.97600**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:20.8329**

**testing time:0.0513**

**training accuracy:1.00000**

**testing accuracy(e1):0.78100**

**testing accuracy(e2):0.93900**

**testing accuracy(e3):0.97900**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:48.2125**

**testing time:0.0724**

**training accuracy:1.00000**

**testing accuracy(e1):0.79300**

**testing accuracy(e2):0.94600**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:3.9659**

**testing time:0.0381**

**training accuracy:1.00000**

**testing accuracy(e1):0.76600**

**testing accuracy(e2):0.92800**

**testing accuracy(e3):0.97200**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:12.5874**

**testing time:0.0414**

**training accuracy:1.00000**

**testing accuracy(e1):0.76900**

**testing accuracy(e2):0.92800**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:30.9519**

**testing time:0.0507**

**training accuracy:1.00000**

**testing accuracy(e1):0.78500**

**testing accuracy(e2):0.92900**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:71.6704**

**testing time:0.0723**

**training accuracy:1.00000**

**testing accuracy(e1):0.78400**

**testing accuracy(e2):0.94300**

**testing accuracy(e3):0.97900**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:5.1919**

**testing time:0.0363**

**training accuracy:1.00000**

**testing accuracy(e1):0.76100**

**testing accuracy(e2):0.92600**

**testing accuracy(e3):0.97000**

**testing accuracy(e4):0.98700**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:16.6402**

**testing time:0.0417**

**training accuracy:1.00000**

**testing accuracy(e1):0.77600**

**testing accuracy(e2):0.92500**

**testing accuracy(e3):0.97600**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:40.9803**

**testing time:0.0507**

**training accuracy:1.00000**

**testing accuracy(e1):0.78400**

**testing accuracy(e2):0.93800**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:95.0859**

**testing time:0.0725**

**training accuracy:1.00000**

**testing accuracy(e1):0.78500**

**testing accuracy(e2):0.93100**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:1.5926**

**testing time:0.0364**

**training accuracy:0.82840**

**testing accuracy(e1):0.71000**

**testing accuracy(e2):0.86300**

**testing accuracy(e3):0.92700**

**testing accuracy(e4):0.96400**

**testing accuracy(e5):0.98700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:4.5203**

**testing time:0.0439**

**training accuracy:0.84620**

**testing accuracy(e1):0.71700**

**testing accuracy(e2):0.87600**

**testing accuracy(e3):0.94300**

**testing accuracy(e4):0.97500**

**testing accuracy(e5):0.98900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:10.5547**

**testing time:0.0504**

**training accuracy:0.79680**

**testing accuracy(e1):0.66900**

**testing accuracy(e2):0.84300**

**testing accuracy(e3):0.92600**

**testing accuracy(e4):0.97500**

**testing accuracy(e5):0.98800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:23.9613**

**testing time:0.0724**

**training accuracy:0.73440**

**testing accuracy(e1):0.67200**

**testing accuracy(e2):0.84300**

**testing accuracy(e3):0.92200**

**testing accuracy(e4):0.96900**

**testing accuracy(e5):0.98200**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:2.8885**

**testing time:0.0362**

**training accuracy:0.93440**

**testing accuracy(e1):0.75300**

**testing accuracy(e2):0.91800**

**testing accuracy(e3):0.96300**

**testing accuracy(e4):0.98200**

**testing accuracy(e5):0.99200**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:8.5714**

**testing time:0.0416**

**training accuracy:0.96640**

**testing accuracy(e1):0.77000**

**testing accuracy(e2):0.92800**

**testing accuracy(e3):0.97200**

**testing accuracy(e4):0.98500**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:20.4260**

**testing time:0.0507**

**training accuracy:0.97560**

**testing accuracy(e1):0.77400**

**testing accuracy(e2):0.91800**

**testing accuracy(e3):0.96900**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99200**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:46.6188**

**testing time:0.0723**

**training accuracy:0.96060**

**testing accuracy(e1):0.78800**

**testing accuracy(e2):0.94000**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:4.2153**

**testing time:0.0393**

**training accuracy:0.97580**

**testing accuracy(e1):0.75800**

**testing accuracy(e2):0.92700**

**testing accuracy(e3):0.97500**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:12.6223**

**testing time:0.0412**

**training accuracy:0.99880**

**testing accuracy(e1):0.78500**

**testing accuracy(e2):0.93800**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:30.2016**

**testing time:0.0506**

**training accuracy:0.99960**

**testing accuracy(e1):0.76900**

**testing accuracy(e2):0.93200**

**testing accuracy(e3):0.97600**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:69.3191**

**testing time:0.0719**

**training accuracy:0.99860**

**testing accuracy(e1):0.79500**

**testing accuracy(e2):0.93600**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:5.4968**

**testing time:0.0363**

**training accuracy:0.99280**

**testing accuracy(e1):0.76400**

**testing accuracy(e2):0.92600**

**testing accuracy(e3):0.96600**

**testing accuracy(e4):0.98700**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:16.6919**

**testing time:0.0416**

**training accuracy:1.00000**

**testing accuracy(e1):0.77600**

**testing accuracy(e2):0.92200**

**testing accuracy(e3):0.97700**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:40.0507**

**testing time:0.0505**

**training accuracy:1.00000**

**testing accuracy(e1):0.77600**

**testing accuracy(e2):0.93400**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:92.1463**

**testing time:0.0721**

**training accuracy:1.00000**

**testing accuracy(e1):0.78900**

**testing accuracy(e2):0.93600**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:1.5232**

**testing time:0.0362**

**training accuracy:0.65120**

**testing accuracy(e1):0.55400**

**testing accuracy(e2):0.73900**

**testing accuracy(e3):0.85900**

**testing accuracy(e4):0.92300**

**testing accuracy(e5):0.97900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:4.3937**

**testing time:0.0445**

**training accuracy:0.65340**

**testing accuracy(e1):0.58800**

**testing accuracy(e2):0.76300**

**testing accuracy(e3):0.85600**

**testing accuracy(e4):0.92600**

**testing accuracy(e5):0.97200**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:10.3252**

**testing time:0.0516**

**training accuracy:0.64780**

**testing accuracy(e1):0.58000**

**testing accuracy(e2):0.71700**

**testing accuracy(e3):0.82000**

**testing accuracy(e4):0.87800**

**testing accuracy(e5):0.95800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:23.8906**

**testing time:0.0722**

**training accuracy:0.56080**

**testing accuracy(e1):0.51800**

**testing accuracy(e2):0.68400**

**testing accuracy(e3):0.81100**

**testing accuracy(e4):0.87600**

**testing accuracy(e5):0.94500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:2.7746**

**testing time:0.0361**

**training accuracy:0.83480**

**testing accuracy(e1):0.68400**

**testing accuracy(e2):0.85500**

**testing accuracy(e3):0.93200**

**testing accuracy(e4):0.96700**

**testing accuracy(e5):0.98800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:8.3572**

**testing time:0.0415**

**training accuracy:0.85250**

**testing accuracy(e1):0.70900**

**testing accuracy(e2):0.86800**

**testing accuracy(e3):0.94400**

**testing accuracy(e4):0.97800**

**testing accuracy(e5):0.99200**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:20.0593**

**testing time:0.0506**

**training accuracy:0.82450**

**testing accuracy(e1):0.70400**

**testing accuracy(e2):0.84800**

**testing accuracy(e3):0.92600**

**testing accuracy(e4):0.96300**

**testing accuracy(e5):0.98600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:46.3070**

**testing time:0.0725**

**training accuracy:0.78370**

**testing accuracy(e1):0.71300**

**testing accuracy(e2):0.86400**

**testing accuracy(e3):0.93400**

**testing accuracy(e4):0.96400**

**testing accuracy(e5):0.98500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:4.0180**

**testing time:0.0362**

**training accuracy:0.90030**

**testing accuracy(e1):0.73600**

**testing accuracy(e2):0.89100**

**testing accuracy(e3):0.95200**

**testing accuracy(e4):0.98000**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:12.3226**

**testing time:0.0413**

**training accuracy:0.93350**

**testing accuracy(e1):0.74900**

**testing accuracy(e2):0.91500**

**testing accuracy(e3):0.96900**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:29.7428**

**testing time:0.0506**

**training accuracy:0.92550**

**testing accuracy(e1):0.72300**

**testing accuracy(e2):0.90300**

**testing accuracy(e3):0.97400**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:68.7712**

**testing time:0.0721**

**training accuracy:0.89630**

**testing accuracy(e1):0.74900**

**testing accuracy(e2):0.91300**

**testing accuracy(e3):0.96700**

**testing accuracy(e4):0.98500**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:5.2626**

**testing time:0.0362**

**training accuracy:0.93710**

**testing accuracy(e1):0.75100**

**testing accuracy(e2):0.90500**

**testing accuracy(e3):0.96500**

**testing accuracy(e4):0.98500**

**testing accuracy(e5):0.98900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:16.2911**

**testing time:0.0412**

**training accuracy:0.97730**

**testing accuracy(e1):0.76600**

**testing accuracy(e2):0.92700**

**testing accuracy(e3):0.97500**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:39.4121**

**testing time:0.0505**

**training accuracy:0.98070**

**testing accuracy(e1):0.76200**

**testing accuracy(e2):0.92900**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=1000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:91.2250**

**testing time:0.0717**

**training accuracy:0.96090**

**testing accuracy(e1):0.77500**

**testing accuracy(e2):0.91700**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:3.2933**

**testing time:0.0358**

**training accuracy:0.97800**

**testing accuracy(e1):0.79900**

**testing accuracy(e2):0.95000**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:9.2754**

**testing time:0.0416**

**training accuracy:0.98700**

**testing accuracy(e1):0.78800**

**testing accuracy(e2):0.93700**

**testing accuracy(e3):0.97600**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:22.2305**

**testing time:0.0508**

**training accuracy:0.98700**

**testing accuracy(e1):0.77900**

**testing accuracy(e2):0.93800**

**testing accuracy(e3):0.97400**

**testing accuracy(e4):0.98300**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:51.3219**

**testing time:0.0725**

**training accuracy:0.90100**

**testing accuracy(e1):0.78100**

**testing accuracy(e2):0.90900**

**testing accuracy(e3):0.96000**

**testing accuracy(e4):0.98300**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:6.5094**

**testing time:0.0361**

**training accuracy:0.98900**

**testing accuracy(e1):0.79700**

**testing accuracy(e2):0.94300**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:17.8744**

**testing time:0.0416**

**training accuracy:0.99800**

**testing accuracy(e1):0.79800**

**testing accuracy(e2):0.93500**

**testing accuracy(e3):0.97300**

**testing accuracy(e4):0.98600**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:43.2040**

**testing time:0.0502**

**training accuracy:0.99500**

**testing accuracy(e1):0.76800**

**testing accuracy(e2):0.93300**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:100.4714**

**testing time:0.0724**

**training accuracy:1.00000**

**testing accuracy(e1):0.81300**

**testing accuracy(e2):0.94700**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:9.1496**

**testing time:0.0359**

**training accuracy:0.99000**

**testing accuracy(e1):0.78500**

**testing accuracy(e2):0.93900**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:26.4705**

**testing time:0.0415**

**training accuracy:0.97600**

**testing accuracy(e1):0.77100**

**testing accuracy(e2):0.91400**

**testing accuracy(e3):0.96600**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:64.1913**

**testing time:0.0503**

**training accuracy:0.99500**

**testing accuracy(e1):0.79800**

**testing accuracy(e2):0.93700**

**testing accuracy(e3):0.97600**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:148.9941**

**testing time:0.0726**

**training accuracy:1.00000**

**testing accuracy(e1):0.79300**

**testing accuracy(e2):0.93500**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:11.9675**

**testing time:0.0363**

**training accuracy:0.98700**

**testing accuracy(e1):0.78600**

**testing accuracy(e2):0.93900**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:35.0672**

**testing time:0.0415**

**training accuracy:0.99500**

**testing accuracy(e1):0.78500**

**testing accuracy(e2):0.94200**

**testing accuracy(e3):0.97600**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:84.9401**

**testing time:0.0505**

**training accuracy:0.98900**

**testing accuracy(e1):0.77800**

**testing accuracy(e2):0.92400**

**testing accuracy(e3):0.96800**

**testing accuracy(e4):0.98300**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:197.7297**

**testing time:0.0720**

**training accuracy:1.00000**

**testing accuracy(e1):0.82100**

**testing accuracy(e2):0.93800**

**testing accuracy(e3):0.97900**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99300**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:2.7744**

**testing time:0.0358**

**training accuracy:0.94700**

**testing accuracy(e1):0.80100**

**testing accuracy(e2):0.93900**

**testing accuracy(e3):0.97900**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:8.6940**

**testing time:0.0411**

**training accuracy:0.95650**

**testing accuracy(e1):0.79700**

**testing accuracy(e2):0.93700**

**testing accuracy(e3):0.97200**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:21.2773**

**testing time:0.0502**

**training accuracy:0.97950**

**testing accuracy(e1):0.79000**

**testing accuracy(e2):0.93000**

**testing accuracy(e3):0.97300**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:49.0750**

**testing time:0.0725**

**training accuracy:0.97100**

**testing accuracy(e1):0.80100**

**testing accuracy(e2):0.94700**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:5.2255**

**testing time:0.0359**

**training accuracy:0.98650**

**testing accuracy(e1):0.80300**

**testing accuracy(e2):0.94800**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:16.7383**

**testing time:0.0418**

**training accuracy:0.97850**

**testing accuracy(e1):0.79600**

**testing accuracy(e2):0.93900**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:41.3577**

**testing time:0.0506**

**training accuracy:0.96700**

**testing accuracy(e1):0.79500**

**testing accuracy(e2):0.94000**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:96.0466**

**testing time:0.0722**

**training accuracy:0.91450**

**testing accuracy(e1):0.76100**

**testing accuracy(e2):0.90900**

**testing accuracy(e3):0.96000**

**testing accuracy(e4):0.98300**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:7.6583**

**testing time:0.0360**

**training accuracy:0.99650**

**testing accuracy(e1):0.80700**

**testing accuracy(e2):0.94900**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:24.8067**

**testing time:0.0415**

**training accuracy:1.00000**

**testing accuracy(e1):0.80900**

**testing accuracy(e2):0.94500**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:61.4721**

**testing time:0.0509**

**training accuracy:1.00000**

**testing accuracy(e1):0.80500**

**testing accuracy(e2):0.94100**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:143.0629**

**testing time:0.0722**

**training accuracy:0.97750**

**testing accuracy(e1):0.79400**

**testing accuracy(e2):0.93700**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:10.1061**

**testing time:0.0362**

**training accuracy:0.99050**

**testing accuracy(e1):0.79500**

**testing accuracy(e2):0.93900**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:32.8798**

**testing time:0.0453**

**training accuracy:1.00000**

**testing accuracy(e1):0.80500**

**testing accuracy(e2):0.94400**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:82.1617**

**testing time:0.0503**

**training accuracy:1.00000**

**testing accuracy(e1):0.81500**

**testing accuracy(e2):0.94200**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:190.6005**

**testing time:0.0720**

**training accuracy:1.00000**

**testing accuracy(e1):0.80500**

**testing accuracy(e2):0.94400**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:2.9664**

**testing time:0.0360**

**training accuracy:0.88080**

**testing accuracy(e1):0.79000**

**testing accuracy(e2):0.91900**

**testing accuracy(e3):0.96900**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:8.7693**

**testing time:0.0420**

**training accuracy:0.90200**

**testing accuracy(e1):0.79800**

**testing accuracy(e2):0.94100**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:20.8259**

**testing time:0.0512**

**training accuracy:0.90440**

**testing accuracy(e1):0.78100**

**testing accuracy(e2):0.94300**

**testing accuracy(e3):0.97400**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:47.5642**

**testing time:0.0784**

**training accuracy:0.88340**

**testing accuracy(e1):0.80200**

**testing accuracy(e2):0.94300**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:5.6964**

**testing time:0.0449**

**training accuracy:0.94620**

**testing accuracy(e1):0.80500**

**testing accuracy(e2):0.93800**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:16.8885**

**testing time:0.0413**

**training accuracy:0.98800**

**testing accuracy(e1):0.82700**

**testing accuracy(e2):0.94700**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:40.5731**

**testing time:0.0504**

**training accuracy:0.99780**

**testing accuracy(e1):0.80900**

**testing accuracy(e2):0.94600**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:93.2983**

**testing time:0.0720**

**training accuracy:0.99660**

**testing accuracy(e1):0.81700**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:8.1730**

**testing time:0.0359**

**training accuracy:0.97780**

**testing accuracy(e1):0.81600**

**testing accuracy(e2):0.94900**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:25.1104**

**testing time:0.0411**

**training accuracy:0.99920**

**testing accuracy(e1):0.82200**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:60.1086**

**testing time:0.0505**

**training accuracy:1.00000**

**testing accuracy(e1):0.81200**

**testing accuracy(e2):0.95000**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:138.5411**

**testing time:0.0723**

**training accuracy:1.00000**

**testing accuracy(e1):0.82100**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:10.8168**

**testing time:0.0360**

**training accuracy:0.99380**

**testing accuracy(e1):0.80500**

**testing accuracy(e2):0.94100**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:33.0390**

**testing time:0.0414**

**training accuracy:1.00000**

**testing accuracy(e1):0.79400**

**testing accuracy(e2):0.95000**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:79.8840**

**testing time:0.0507**

**training accuracy:1.00000**

**testing accuracy(e1):0.80700**

**testing accuracy(e2):0.94600**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:183.8703**

**testing time:0.0715**

**training accuracy:1.00000**

**testing accuracy(e1):0.82400**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:2.8287**

**testing time:0.0360**

**training accuracy:0.80960**

**testing accuracy(e1):0.73400**

**testing accuracy(e2):0.86700**

**testing accuracy(e3):0.93400**

**testing accuracy(e4):0.97300**

**testing accuracy(e5):0.99300**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:8.4977**

**testing time:0.0416**

**training accuracy:0.80410**

**testing accuracy(e1):0.73300**

**testing accuracy(e2):0.86500**

**testing accuracy(e3):0.93500**

**testing accuracy(e4):0.97700**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:20.3095**

**testing time:0.0503**

**training accuracy:0.74760**

**testing accuracy(e1):0.69900**

**testing accuracy(e2):0.86900**

**testing accuracy(e3):0.94000**

**testing accuracy(e4):0.97900**

**testing accuracy(e5):0.98600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:47.5066**

**testing time:0.0719**

**training accuracy:0.73640**

**testing accuracy(e1):0.68300**

**testing accuracy(e2):0.85000**

**testing accuracy(e3):0.92900**

**testing accuracy(e4):0.96900**

**testing accuracy(e5):0.98600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:5.3239**

**testing time:0.0357**

**training accuracy:0.88480**

**testing accuracy(e1):0.79000**

**testing accuracy(e2):0.92000**

**testing accuracy(e3):0.96700**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:16.4014**

**testing time:0.0411**

**training accuracy:0.91450**

**testing accuracy(e1):0.79600**

**testing accuracy(e2):0.93500**

**testing accuracy(e3):0.97600**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:39.7040**

**testing time:0.0504**

**training accuracy:0.92670**

**testing accuracy(e1):0.79200**

**testing accuracy(e2):0.93600**

**testing accuracy(e3):0.97900**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:92.8014**

**testing time:0.0721**

**training accuracy:0.90400**

**testing accuracy(e1):0.79900**

**testing accuracy(e2):0.93700**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:7.8053**

**testing time:0.0358**

**training accuracy:0.93310**

**testing accuracy(e1):0.80800**

**testing accuracy(e2):0.93200**

**testing accuracy(e3):0.97500**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:24.2995**

**testing time:0.0415**

**training accuracy:0.96650**

**testing accuracy(e1):0.80300**

**testing accuracy(e2):0.94100**

**testing accuracy(e3):0.97900**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:58.9737**

**testing time:0.0506**

**training accuracy:0.97880**

**testing accuracy(e1):0.80800**

**testing accuracy(e2):0.95200**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:137.0909**

**testing time:0.0720**

**training accuracy:0.96490**

**testing accuracy(e1):0.80300**

**testing accuracy(e2):0.95100**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:10.3175**

**testing time:0.0361**

**training accuracy:0.95640**

**testing accuracy(e1):0.80600**

**testing accuracy(e2):0.94300**

**testing accuracy(e3):0.97500**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:32.2729**

**testing time:0.0413**

**training accuracy:0.99040**

**testing accuracy(e1):0.81500**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:83.0611**

**testing time:0.0509**

**training accuracy:0.99790**

**testing accuracy(e1):0.80700**

**testing accuracy(e2):0.95300**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=2000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:191.9908**

**testing time:0.0738**

**training accuracy:0.99950**

**testing accuracy(e1):0.83200**

**testing accuracy(e2):0.96000**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:4.8344**

**testing time:0.0373**

**training accuracy:0.96900**

**testing accuracy(e1):0.82300**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:13.8859**

**testing time:0.0417**

**training accuracy:0.97600**

**testing accuracy(e1):0.81100**

**testing accuracy(e2):0.94500**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:33.9336**

**testing time:0.0508**

**training accuracy:0.94700**

**testing accuracy(e1):0.80400**

**testing accuracy(e2):0.93500**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:78.8433**

**testing time:0.0738**

**training accuracy:0.94600**

**testing accuracy(e1):0.80000**

**testing accuracy(e2):0.92700**

**testing accuracy(e3):0.97700**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:9.1975**

**testing time:0.0363**

**training accuracy:0.98600**

**testing accuracy(e1):0.81700**

**testing accuracy(e2):0.94600**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:26.9485**

**testing time:0.0421**

**training accuracy:0.99300**

**testing accuracy(e1):0.79400**

**testing accuracy(e2):0.92500**

**testing accuracy(e3):0.97600**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:65.1968**

**testing time:0.0507**

**training accuracy:0.98900**

**testing accuracy(e1):0.79200**

**testing accuracy(e2):0.92400**

**testing accuracy(e3):0.97300**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:153.2605**

**testing time:0.0731**

**training accuracy:0.98800**

**testing accuracy(e1):0.81200**

**testing accuracy(e2):0.95100**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:13.3841**

**testing time:0.0362**

**training accuracy:0.99600**

**testing accuracy(e1):0.82100**

**testing accuracy(e2):0.94700**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:39.4913**

**testing time:0.0414**

**training accuracy:1.00000**

**testing accuracy(e1):0.83100**

**testing accuracy(e2):0.95000**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:96.9585**

**testing time:0.0508**

**training accuracy:1.00000**

**testing accuracy(e1):0.81600**

**testing accuracy(e2):0.95300**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:227.9431**

**testing time:0.0739**

**training accuracy:1.00000**

**testing accuracy(e1):0.82200**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.97600**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:17.6946**

**testing time:0.0366**

**training accuracy:0.97400**

**testing accuracy(e1):0.81000**

**testing accuracy(e2):0.93400**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:52.4159**

**testing time:0.0416**

**training accuracy:1.00000**

**testing accuracy(e1):0.82100**

**testing accuracy(e2):0.95000**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:128.4446**

**testing time:0.0511**

**training accuracy:1.00000**

**testing accuracy(e1):0.82000**

**testing accuracy(e2):0.95000**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:307.2610**

**testing time:0.0749**

**training accuracy:1.00000**

**testing accuracy(e1):0.81800**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:4.2492**

**testing time:0.0364**

**training accuracy:0.93600**

**testing accuracy(e1):0.82500**

**testing accuracy(e2):0.95200**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:13.1816**

**testing time:0.0426**

**training accuracy:0.98050**

**testing accuracy(e1):0.82500**

**testing accuracy(e2):0.95100**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:32.8969**

**testing time:0.0559**

**training accuracy:0.98550**

**testing accuracy(e1):0.79900**

**testing accuracy(e2):0.94000**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:75.9250**

**testing time:0.0756**

**training accuracy:0.93300**

**testing accuracy(e1):0.81100**

**testing accuracy(e2):0.95000**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:7.9751**

**testing time:0.0376**

**training accuracy:0.97900**

**testing accuracy(e1):0.82500**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:25.6426**

**testing time:0.0429**

**training accuracy:0.98850**

**testing accuracy(e1):0.80300**

**testing accuracy(e2):0.94700**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99700**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:64.1299**

**testing time:0.0511**

**training accuracy:0.95550**

**testing accuracy(e1):0.80400**

**testing accuracy(e2):0.93800**

**testing accuracy(e3):0.96900**

**testing accuracy(e4):0.98700**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:155.5247**

**testing time:0.0863**

**training accuracy:0.97650**

**testing accuracy(e1):0.77800**

**testing accuracy(e2):0.93300**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:12.4282**

**testing time:0.0414**

**training accuracy:0.99300**

**testing accuracy(e1):0.81900**

**testing accuracy(e2):0.95100**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:40.0299**

**testing time:0.0431**

**training accuracy:0.97250**

**testing accuracy(e1):0.80600**

**testing accuracy(e2):0.93800**

**testing accuracy(e3):0.97100**

**testing accuracy(e4):0.98700**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:97.1914**

**testing time:0.0526**

**training accuracy:0.98550**

**testing accuracy(e1):0.80100**

**testing accuracy(e2):0.93900**

**testing accuracy(e3):0.97200**

**testing accuracy(e4):0.98700**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:227.2114**

**testing time:0.0865**

**training accuracy:0.97900**

**testing accuracy(e1):0.78100**

**testing accuracy(e2):0.93600**

**testing accuracy(e3):0.97600**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:16.9330**

**testing time:0.0376**

**training accuracy:0.97750**

**testing accuracy(e1):0.79700**

**testing accuracy(e2):0.93600**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:52.5169**

**testing time:0.0430**

**training accuracy:0.95950**

**testing accuracy(e1):0.79100**

**testing accuracy(e2):0.93900**

**testing accuracy(e3):0.97400**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:127.3762**

**testing time:0.0536**

**training accuracy:0.93700**

**testing accuracy(e1):0.78700**

**testing accuracy(e2):0.92400**

**testing accuracy(e3):0.97400**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:292.8680**

**testing time:0.0731**

**training accuracy:0.95800**

**testing accuracy(e1):0.78100**

**testing accuracy(e2):0.92900**

**testing accuracy(e3):0.97100**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99500**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:4.3233**

**testing time:0.0361**

**training accuracy:0.89040**

**testing accuracy(e1):0.80800**

**testing accuracy(e2):0.94200**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:13.1185**

**testing time:0.0418**

**training accuracy:0.93400**

**testing accuracy(e1):0.81700**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:31.6790**

**testing time:0.0505**

**training accuracy:0.95280**

**testing accuracy(e1):0.81800**

**testing accuracy(e2):0.94700**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:73.5084**

**testing time:0.0728**

**training accuracy:0.92720**

**testing accuracy(e1):0.81200**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:8.2860**

**testing time:0.0360**

**training accuracy:0.95600**

**testing accuracy(e1):0.83400**

**testing accuracy(e2):0.95100**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:25.5323**

**testing time:0.0415**

**training accuracy:0.98860**

**testing accuracy(e1):0.82700**

**testing accuracy(e2):0.95300**

**testing accuracy(e3):0.99100**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:62.0720**

**testing time:0.0509**

**training accuracy:0.99880**

**testing accuracy(e1):0.82800**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:144.3531**

**testing time:0.0727**

**training accuracy:0.98820**

**testing accuracy(e1):0.83000**

**testing accuracy(e2):0.95900**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:12.1379**

**testing time:0.0361**

**training accuracy:0.97540**

**testing accuracy(e1):0.83800**

**testing accuracy(e2):0.95900**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:37.7915**

**testing time:0.0416**

**training accuracy:0.99880**

**testing accuracy(e1):0.82800**

**testing accuracy(e2):0.94900**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:92.2056**

**testing time:0.0504**

**training accuracy:1.00000**

**testing accuracy(e1):0.82900**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:215.2014**

**testing time:0.0724**

**training accuracy:1.00000**

**testing accuracy(e1):0.83200**

**testing accuracy(e2):0.95200**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:16.1410**

**testing time:0.0363**

**training accuracy:0.99100**

**testing accuracy(e1):0.83600**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:50.1489**

**testing time:0.0415**

**training accuracy:1.00000**

**testing accuracy(e1):0.83200**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:122.4921**

**testing time:0.0507**

**training accuracy:1.00000**

**testing accuracy(e1):0.81600**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:285.9449**

**testing time:0.0731**

**training accuracy:1.00000**

**testing accuracy(e1):0.82200**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.99100**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:4.1711**

**testing time:0.0363**

**training accuracy:0.82870**

**testing accuracy(e1):0.76300**

**testing accuracy(e2):0.90800**

**testing accuracy(e3):0.95600**

**testing accuracy(e4):0.98700**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:12.8769**

**testing time:0.0416**

**training accuracy:0.84770**

**testing accuracy(e1):0.77200**

**testing accuracy(e2):0.91800**

**testing accuracy(e3):0.97500**

**testing accuracy(e4):0.98900**

**testing accuracy(e5):0.99400**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:31.2072**

**testing time:0.0508**

**training accuracy:0.83640**

**testing accuracy(e1):0.78600**

**testing accuracy(e2):0.92600**

**testing accuracy(e3):0.97400**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:72.7792**

**testing time:0.0725**

**training accuracy:0.81810**

**testing accuracy(e1):0.75100**

**testing accuracy(e2):0.91600**

**testing accuracy(e3):0.96700**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:7.9430**

**testing time:0.0360**

**training accuracy:0.90700**

**testing accuracy(e1):0.80900**

**testing accuracy(e2):0.93800**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:24.9549**

**testing time:0.0415**

**training accuracy:0.92880**

**testing accuracy(e1):0.83100**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:61.0813**

**testing time:0.0509**

**training accuracy:0.95660**

**testing accuracy(e1):0.82200**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:142.5111**

**testing time:0.0728**

**training accuracy:0.94670**

**testing accuracy(e1):0.83200**

**testing accuracy(e2):0.96300**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:11.7050**

**testing time:0.0361**

**training accuracy:0.93610**

**testing accuracy(e1):0.82800**

**testing accuracy(e2):0.94600**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:37.0816**

**testing time:0.0414**

**training accuracy:0.97440**

**testing accuracy(e1):0.81500**

**testing accuracy(e2):0.95200**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:90.7981**

**testing time:0.0509**

**training accuracy:0.99200**

**testing accuracy(e1):0.83500**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:212.6980**

**testing time:0.0732**

**training accuracy:0.99370**

**testing accuracy(e1):0.84000**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:15.4823**

**testing time:0.0360**

**training accuracy:0.95930**

**testing accuracy(e1):0.83100**

**testing accuracy(e2):0.95100**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:49.1736**

**testing time:0.0414**

**training accuracy:0.99190**

**testing accuracy(e1):0.83100**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:120.7050**

**testing time:0.0508**

**training accuracy:0.99990**

**testing accuracy(e1):0.82600**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=3000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:282.5083**

**testing time:0.0728**

**training accuracy:0.99970**

**testing accuracy(e1):0.83500**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:6.1964**

**testing time:0.0360**

**training accuracy:0.95800**

**testing accuracy(e1):0.83600**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:18.2107**

**testing time:0.0418**

**training accuracy:0.94900**

**testing accuracy(e1):0.79400**

**testing accuracy(e2):0.94900**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:44.0156**

**testing time:0.0505**

**training accuracy:0.97000**

**testing accuracy(e1):0.78800**

**testing accuracy(e2):0.93800**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:103.6564**

**testing time:0.0728**

**training accuracy:0.96900**

**testing accuracy(e1):0.80500**

**testing accuracy(e2):0.94300**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:11.9322**

**testing time:0.0361**

**training accuracy:0.96700**

**testing accuracy(e1):0.80000**

**testing accuracy(e2):0.95200**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:35.5134**

**testing time:0.0415**

**training accuracy:0.97900**

**testing accuracy(e1):0.80200**

**testing accuracy(e2):0.94800**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:86.5945**

**testing time:0.0512**

**training accuracy:1.00000**

**testing accuracy(e1):0.81900**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:204.4188**

**testing time:0.0727**

**training accuracy:1.00000**

**testing accuracy(e1):0.81900**

**testing accuracy(e2):0.94800**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:17.8419**

**testing time:0.0363**

**training accuracy:0.98900**

**testing accuracy(e1):0.81700**

**testing accuracy(e2):0.94600**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:52.7028**

**testing time:0.0414**

**training accuracy:1.00000**

**testing accuracy(e1):0.82100**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:128.4330**

**testing time:0.0506**

**training accuracy:1.00000**

**testing accuracy(e1):0.82500**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:303.7217**

**testing time:0.0730**

**training accuracy:0.99500**

**testing accuracy(e1):0.82300**

**testing accuracy(e2):0.95900**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:23.8415**

**testing time:0.0360**

**training accuracy:0.98000**

**testing accuracy(e1):0.80900**

**testing accuracy(e2):0.95200**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:69.6215**

**testing time:0.0414**

**training accuracy:1.00000**

**testing accuracy(e1):0.81900**

**testing accuracy(e2):0.94400**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:170.4486**

**testing time:0.0505**

**training accuracy:1.00000**

**testing accuracy(e1):0.82100**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:403.1309**

**testing time:0.0726**

**training accuracy:1.00000**

**testing accuracy(e1):0.82300**

**testing accuracy(e2):0.95900**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:5.3692**

**testing time:0.0363**

**training accuracy:0.93100**

**testing accuracy(e1):0.82900**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:17.3077**

**testing time:0.0415**

**training accuracy:0.96400**

**testing accuracy(e1):0.82000**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:42.8420**

**testing time:0.0507**

**training accuracy:0.94400**

**testing accuracy(e1):0.80100**

**testing accuracy(e2):0.93400**

**testing accuracy(e3):0.97200**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:100.1199**

**testing time:0.0725**

**training accuracy:0.94650**

**testing accuracy(e1):0.79600**

**testing accuracy(e2):0.93200**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:10.3098**

**testing time:0.0363**

**training accuracy:0.98250**

**testing accuracy(e1):0.83800**

**testing accuracy(e2):0.96400**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:33.5393**

**testing time:0.0415**

**training accuracy:0.97950**

**testing accuracy(e1):0.81100**

**testing accuracy(e2):0.94500**

**testing accuracy(e3):0.97400**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:83.6393**

**testing time:0.0506**

**training accuracy:0.98000**

**testing accuracy(e1):0.80900**

**testing accuracy(e2):0.94600**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:196.8828**

**testing time:0.0730**

**training accuracy:0.96400**

**testing accuracy(e1):0.81200**

**testing accuracy(e2):0.96100**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:15.2621**

**testing time:0.0360**

**training accuracy:0.99100**

**testing accuracy(e1):0.83600**

**testing accuracy(e2):0.95900**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:49.7980**

**testing time:0.0417**

**training accuracy:0.98900**

**testing accuracy(e1):0.79300**

**testing accuracy(e2):0.94500**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:124.5145**

**testing time:0.0508**

**training accuracy:0.99100**

**testing accuracy(e1):0.81900**

**testing accuracy(e2):0.94900**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:293.1977**

**testing time:0.0729**

**training accuracy:1.00000**

**testing accuracy(e1):0.81500**

**testing accuracy(e2):0.95000**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:20.2232**

**testing time:0.0362**

**training accuracy:0.98900**

**testing accuracy(e1):0.81000**

**testing accuracy(e2):0.95300**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:66.2458**

**testing time:0.0417**

**training accuracy:0.99750**

**testing accuracy(e1):0.82000**

**testing accuracy(e2):0.94200**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:165.3953**

**testing time:0.0507**

**training accuracy:0.99900**

**testing accuracy(e1):0.82200**

**testing accuracy(e2):0.95000**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:389.4594**

**testing time:0.0727**

**training accuracy:1.00000**

**testing accuracy(e1):0.81200**

**testing accuracy(e2):0.95200**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:5.6774**

**testing time:0.0361**

**training accuracy:0.90540**

**testing accuracy(e1):0.83300**

**testing accuracy(e2):0.95200**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:17.4896**

**testing time:0.0413**

**training accuracy:0.93500**

**testing accuracy(e1):0.82300**

**testing accuracy(e2):0.96500**

**testing accuracy(e3):0.99200**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:42.0535**

**testing time:0.0506**

**training accuracy:0.94880**

**testing accuracy(e1):0.81700**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.99100**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:98.0971**

**testing time:0.0796**

**training accuracy:0.92580**

**testing accuracy(e1):0.81400**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:11.2909**

**testing time:0.0365**

**training accuracy:0.93980**

**testing accuracy(e1):0.83300**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.99100**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:35.3079**

**testing time:0.0448**

**training accuracy:0.97920**

**testing accuracy(e1):0.82200**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.99200**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:85.9071**

**testing time:0.0606**

**training accuracy:0.98020**

**testing accuracy(e1):0.82300**

**testing accuracy(e2):0.95900**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:197.5565**

**testing time:0.0743**

**training accuracy:0.97920**

**testing accuracy(e1):0.81700**

**testing accuracy(e2):0.94800**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:16.4001**

**testing time:0.0368**

**training accuracy:0.96960**

**testing accuracy(e1):0.84400**

**testing accuracy(e2):0.96100**

**testing accuracy(e3):0.99400**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:51.3837**

**testing time:0.0418**

**training accuracy:0.98980**

**testing accuracy(e1):0.82300**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:124.0557**

**testing time:0.0507**

**training accuracy:0.99620**

**testing accuracy(e1):0.82200**

**testing accuracy(e2):0.94900**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:292.6987**

**testing time:0.0750**

**training accuracy:0.97080**

**testing accuracy(e1):0.79600**

**testing accuracy(e2):0.94400**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:22.1299**

**testing time:0.0377**

**training accuracy:0.98560**

**testing accuracy(e1):0.84500**

**testing accuracy(e2):0.95900**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:68.4442**

**testing time:0.0457**

**training accuracy:0.99880**

**testing accuracy(e1):0.81500**

**testing accuracy(e2):0.95900**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:167.9965**

**testing time:0.0526**

**training accuracy:1.00000**

**testing accuracy(e1):0.83200**

**testing accuracy(e2):0.95300**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:389.6929**

**testing time:0.0819**

**training accuracy:0.99380**

**testing accuracy(e1):0.80500**

**testing accuracy(e2):0.95200**

**testing accuracy(e3):0.98000**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:5.6892**

**testing time:0.0378**

**training accuracy:0.85610**

**testing accuracy(e1):0.79300**

**testing accuracy(e2):0.92400**

**testing accuracy(e3):0.97400**

**testing accuracy(e4):0.98800**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:18.0028**

**testing time:0.0453**

**training accuracy:0.87540**

**testing accuracy(e1):0.80400**

**testing accuracy(e2):0.95300**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:42.7103**

**testing time:0.0530**

**training accuracy:0.87530**

**testing accuracy(e1):0.79900**

**testing accuracy(e2):0.94700**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:98.2326**

**testing time:0.0758**

**training accuracy:0.85850**

**testing accuracy(e1):0.79200**

**testing accuracy(e2):0.94100**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:10.7476**

**testing time:0.0379**

**training accuracy:0.91640**

**testing accuracy(e1):0.82900**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:33.8014**

**testing time:0.0431**

**training accuracy:0.94420**

**testing accuracy(e1):0.84000**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:83.3586**

**testing time:0.0555**

**training accuracy:0.96530**

**testing accuracy(e1):0.83500**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:204.6761**

**testing time:0.0785**

**training accuracy:0.96620**

**testing accuracy(e1):0.82500**

**testing accuracy(e2):0.95900**

**testing accuracy(e3):0.99100**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:16.2683**

**testing time:0.0395**

**training accuracy:0.93370**

**testing accuracy(e1):0.83800**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:51.6190**

**testing time:0.0454**

**training accuracy:0.97460**

**testing accuracy(e1):0.84500**

**testing accuracy(e2):0.96000**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:128.7107**

**testing time:0.0553**

**training accuracy:0.99350**

**testing accuracy(e1):0.82800**

**testing accuracy(e2):0.96200**

**testing accuracy(e3):0.99300**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:295.3937**

**testing time:0.0778**

**training accuracy:0.99750**

**testing accuracy(e1):0.84200**

**testing accuracy(e2):0.96600**

**testing accuracy(e3):0.99100**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:21.8318**

**testing time:0.0401**

**training accuracy:0.95210**

**testing accuracy(e1):0.84100**

**testing accuracy(e2):0.96000**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:69.1200**

**testing time:0.0448**

**training accuracy:0.99400**

**testing accuracy(e1):0.82500**

**testing accuracy(e2):0.96100**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:165.7936**

**testing time:0.0529**

**training accuracy:0.99970**

**testing accuracy(e1):0.82800**

**testing accuracy(e2):0.96500**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=4000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:389.0691**

**testing time:0.0778**

**training accuracy:0.99940**

**testing accuracy(e1):0.83300**

**testing accuracy(e2):0.96100**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:8.5285**

**testing time:0.0494**

**training accuracy:0.94500**

**testing accuracy(e1):0.84600**

**testing accuracy(e2):0.96400**

**testing accuracy(e3):0.99300**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:25.1680**

**testing time:0.0454**

**training accuracy:0.95800**

**testing accuracy(e1):0.81600**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:61.2882**

**testing time:0.0610**

**training accuracy:0.97500**

**testing accuracy(e1):0.80800**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:142.4486**

**testing time:0.0797**

**training accuracy:0.97200**

**testing accuracy(e1):0.80800**

**testing accuracy(e2):0.94600**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:16.9822**

**testing time:0.0420**

**training accuracy:0.96100**

**testing accuracy(e1):0.82700**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:48.4343**

**testing time:0.0412**

**training accuracy:0.98300**

**testing accuracy(e1):0.83000**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:107.3570**

**testing time:0.0501**

**training accuracy:0.99300**

**testing accuracy(e1):0.83200**

**testing accuracy(e2):0.96100**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:249.9752**

**testing time:0.0716**

**training accuracy:1.00000**

**testing accuracy(e1):0.83000**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:22.1702**

**testing time:0.0358**

**training accuracy:0.98200**

**testing accuracy(e1):0.82900**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.99200**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:65.1974**

**testing time:0.0415**

**training accuracy:1.00000**

**testing accuracy(e1):0.83000**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:158.9226**

**testing time:0.0502**

**training accuracy:1.00000**

**testing accuracy(e1):0.83000**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:373.5421**

**testing time:0.0721**

**training accuracy:1.00000**

**testing accuracy(e1):0.83400**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:29.7503**

**testing time:0.0357**

**training accuracy:0.97500**

**testing accuracy(e1):0.82400**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:86.7985**

**testing time:0.0414**

**training accuracy:0.99800**

**testing accuracy(e1):0.83200**

**testing accuracy(e2):0.95900**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:211.0012**

**testing time:0.0500**

**training accuracy:1.00000**

**testing accuracy(e1):0.82200**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=100,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:495.9206**

**testing time:0.0718**

**training accuracy:1.00000**

**testing accuracy(e1):0.83300**

**testing accuracy(e2):0.96500**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:6.6075**

**testing time:0.0356**

**training accuracy:0.92750**

**testing accuracy(e1):0.84200**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:21.3619**

**testing time:0.0413**

**training accuracy:0.97250**

**testing accuracy(e1):0.82900**

**testing accuracy(e2):0.95600**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:52.7680**

**testing time:0.0503**

**training accuracy:0.95250**

**testing accuracy(e1):0.79200**

**testing accuracy(e2):0.94200**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:122.0661**

**testing time:0.0717**

**training accuracy:0.91650**

**testing accuracy(e1):0.80600**

**testing accuracy(e2):0.93400**

**testing accuracy(e3):0.97700**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:12.7244**

**testing time:0.0361**

**training accuracy:0.96350**

**testing accuracy(e1):0.83300**

**testing accuracy(e2):0.96400**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:41.8970**

**testing time:0.0413**

**training accuracy:0.96900**

**testing accuracy(e1):0.80600**

**testing accuracy(e2):0.94500**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:102.8956**

**testing time:0.0501**

**training accuracy:0.96200**

**testing accuracy(e1):0.81100**

**testing accuracy(e2):0.94400**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99000**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:239.6212**

**testing time:0.0718**

**training accuracy:0.98450**

**testing accuracy(e1):0.78800**

**testing accuracy(e2):0.92800**

**testing accuracy(e3):0.97700**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:18.8050**

**testing time:0.0359**

**training accuracy:0.97600**

**testing accuracy(e1):0.81200**

**testing accuracy(e2):0.96100**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:61.7474**

**testing time:0.0415**

**training accuracy:0.98350**

**testing accuracy(e1):0.81900**

**testing accuracy(e2):0.95100**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:153.6134**

**testing time:0.0505**

**training accuracy:0.98750**

**testing accuracy(e1):0.81800**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:357.1171**

**testing time:0.0720**

**training accuracy:0.98450**

**testing accuracy(e1):0.82300**

**testing accuracy(e2):0.95200**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:24.9363**

**testing time:0.0357**

**training accuracy:0.98800**

**testing accuracy(e1):0.82100**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:81.7979**

**testing time:0.0410**

**training accuracy:1.00000**

**testing accuracy(e1):0.82600**

**testing accuracy(e2):0.95700**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:203.2979**

**testing time:0.0500**

**training accuracy:1.00000**

**testing accuracy(e1):0.83600**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=200,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:474.2946**

**testing time:0.0720**

**training accuracy:1.00000**

**testing accuracy(e1):0.82100**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:7.0258**

**testing time:0.0359**

**training accuracy:0.90220**

**testing accuracy(e1):0.81800**

**testing accuracy(e2):0.95000**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:21.8285**

**testing time:0.0410**

**training accuracy:0.92500**

**testing accuracy(e1):0.82900**

**testing accuracy(e2):0.96000**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:51.5378**

**testing time:0.0501**

**training accuracy:0.95840**

**testing accuracy(e1):0.83000**

**testing accuracy(e2):0.96500**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:118.2066**

**testing time:0.0719**

**training accuracy:0.95060**

**testing accuracy(e1):0.82600**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.98500**

**testing accuracy(e4):0.99400**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:13.4563**

**testing time:0.0360**

**training accuracy:0.93720**

**testing accuracy(e1):0.84900**

**testing accuracy(e2):0.96500**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:41.6475**

**testing time:0.0411**

**training accuracy:0.97740**

**testing accuracy(e1):0.82900**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:100.7239**

**testing time:0.0500**

**training accuracy:0.97280**

**testing accuracy(e1):0.80800**

**testing accuracy(e2):0.94700**

**testing accuracy(e3):0.98200**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:232.2213**

**testing time:0.0719**

**training accuracy:0.97340**

**testing accuracy(e1):0.81600**

**testing accuracy(e2):0.94800**

**testing accuracy(e3):0.98300**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:19.8919**

**testing time:0.0358**

**training accuracy:0.96400**

**testing accuracy(e1):0.84000**

**testing accuracy(e2):0.96200**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):1.00000**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:61.9555**

**testing time:0.0411**

**training accuracy:0.98280**

**testing accuracy(e1):0.82300**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:149.7858**

**testing time:0.0503**

**training accuracy:0.94140**

**testing accuracy(e1):0.80200**

**testing accuracy(e2):0.94200**

**testing accuracy(e3):0.97800**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:346.5773**

**testing time:0.0717**

**training accuracy:0.97260**

**testing accuracy(e1):0.81200**

**testing accuracy(e2):0.93500**

**testing accuracy(e3):0.97600**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:26.3306**

**testing time:0.0361**

**training accuracy:0.96960**

**testing accuracy(e1):0.83300**

**testing accuracy(e2):0.96000**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:82.1107**

**testing time:0.0412**

**training accuracy:0.97400**

**testing accuracy(e1):0.80800**

**testing accuracy(e2):0.94700**

**testing accuracy(e3):0.98400**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:199.1435**

**testing time:0.0505**

**training accuracy:0.97620**

**testing accuracy(e1):0.81000**

**testing accuracy(e2):0.92700**

**testing accuracy(e3):0.97300**

**testing accuracy(e4):0.99300**

**testing accuracy(e5):0.99800**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=500,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:498.8958**

**testing time:0.0804**

**training accuracy:0.96360**

**testing accuracy(e1):0.79100**

**testing accuracy(e2):0.92300**

**testing accuracy(e3):0.97500**

**testing accuracy(e4):0.99200**

**testing accuracy(e5):0.99600**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=1**

**training time:7.2188**

**testing time:0.0399**

**training accuracy:0.86850**

**testing accuracy(e1):0.81500**

**testing accuracy(e2):0.93700**

**testing accuracy(e3):0.98100**

**testing accuracy(e4):0.99100**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=2**

**training time:22.6024**

**testing time:0.0462**

**training accuracy:0.88670**

**testing accuracy(e1):0.82400**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99500**

**testing accuracy(e5):0.99900**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=3**

**training time:57.3557**

**testing time:0.0694**

**training accuracy:0.89230**

**testing accuracy(e1):0.82600**

**testing accuracy(e2):0.95800**

**testing accuracy(e3):0.98600**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=10,learning\_rate=0.0010,hidden\_layer=4**

**training time:138.1678**

**testing time:0.0916**

**training accuracy:0.87660**

**testing accuracy(e1):0.81300**

**testing accuracy(e2):0.96300**

**testing accuracy(e3):0.99200**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=1**

**training time:14.8434**

**testing time:0.0434**

**training accuracy:0.91170**

**testing accuracy(e1):0.84100**

**testing accuracy(e2):0.96000**

**testing accuracy(e3):0.99200**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=2**

**training time:47.0985**

**testing time:0.0494**

**training accuracy:0.94470**

**testing accuracy(e1):0.83000**

**testing accuracy(e2):0.95400**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99900**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=3**

**training time:104.0749**

**testing time:0.0555**

**training accuracy:0.97180**

**testing accuracy(e1):0.83500**

**testing accuracy(e2):0.96700**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=20,learning\_rate=0.0010,hidden\_layer=4**

**training time:240.8233**

**testing time:0.0894**

**training accuracy:0.96330**

**testing accuracy(e1):0.84300**

**testing accuracy(e2):0.96100**

**testing accuracy(e3):0.98700**

**testing accuracy(e4):0.99700**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=1**

**training time:21.9031**

**testing time:0.0430**

**training accuracy:0.93790**

**testing accuracy(e1):0.84400**

**testing accuracy(e2):0.96200**

**testing accuracy(e3):0.99000**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=2**

**training time:69.8412**

**testing time:0.0521**

**training accuracy:0.97400**

**testing accuracy(e1):0.82900**

**testing accuracy(e2):0.95900**

**testing accuracy(e3):0.99200**

**testing accuracy(e4):1.00000**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=3**

**training time:165.8588**

**testing time:0.0617**

**training accuracy:0.99740**

**testing accuracy(e1):0.84000**

**testing accuracy(e2):0.96000**

**testing accuracy(e3):0.99100**

**testing accuracy(e4):1.00000**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=30,learning\_rate=0.0010,hidden\_layer=4**

**training time:361.6389**

**testing time:0.0754**

**training accuracy:0.99260**

**testing accuracy(e1):0.84200**

**testing accuracy(e2):0.95500**

**testing accuracy(e3):0.98900**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=1**

**training time:26.6996**

**testing time:0.0382**

**training accuracy:0.95650**

**testing accuracy(e1):0.84700**

**testing accuracy(e2):0.96400**

**testing accuracy(e3):0.99100**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=2**

**training time:90.9967**

**testing time:0.0490**

**training accuracy:0.99490**

**testing accuracy(e1):0.84500**

**testing accuracy(e2):0.96600**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=3**

**training time:223.0778**

**testing time:0.0533**

**training accuracy:1.00000**

**testing accuracy(e1):0.82600**

**testing accuracy(e2):0.96300**

**testing accuracy(e3):0.98800**

**testing accuracy(e4):0.99600**

**testing accuracy(e5):1.00000**

**/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/**

**training\_size=5000,batch\_size=1000,**

**epoch\_size=40,learning\_rate=0.0010,hidden\_layer=4**

**training time:471.2708**

**testing time:0.0726**

**training accuracy:1.00000**

**testing accuracy(e1):0.83500**

**testing accuracy(e2):0.96100**

**testing accuracy(e3):0.99100**

**testing accuracy(e4):0.99800**

**testing accuracy(e5):1.00000**