

資結作業

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A.編譯結果

```
hao@ubuntu:~/Desktop$ gcc mlp.c -lm  
hao@ubuntu:~/Desktop$
```

B.執行結果

Output 出每個 epoch 的 loss(共訓練 50000 次), 末尾也有訓練完成後 input 及 ground truth 之比較, 將展示於繳交檔案 zip 中的 a.out

```
hao@ubuntu:~/Desktop$ ./a.out  
epoch 0, sample 0, loss 13.013818  
epoch 0, sample 1, loss 0.002118  
epoch 0, sample 2, loss 0.089255  
epoch 0, sample 3, loss 0.720646  
epoch 1000, sample 0, loss 0.000000  
epoch 1000, sample 1, loss 0.000000  
epoch 1000, sample 2, loss 0.000000  
epoch 1000, sample 3, loss 0.000000  
epoch 2000, sample 0, loss 0.000000  
epoch 2000, sample 1, loss 0.000000  
epoch 2000, sample 2, loss 0.000000  
epoch 2000, sample 3, loss 0.000000  
epoch 3000, sample 0, loss 0.000000  
epoch 3000, sample 1, loss 0.000000  
epoch 3000, sample 2, loss 0.000000  
epoch 3000, sample 3, loss 0.000000  
epoch 4000, sample 0, loss 0.000000  
epoch 4000, sample 1, loss 0.000000  
epoch 4000, sample 2, loss 0.000000  
epoch 4000, sample 3, loss 0.000000  
epoch 5000, sample 0, loss 0.000000  
epoch 5000, sample 1, loss 0.000000  
epoch 5000, sample 2, loss 0.000000  
epoch 5000, sample 3, loss 0.000000  
epoch 6000, sample 0, loss 0.000000  
epoch 6000, sample 1, loss 0.000000  
epoch 6000, sample 2, loss 0.000000  
epoch 6000, sample 3, loss 0.000000  
epoch 7000, sample 0, loss 0.000000  
epoch 7000, sample 1, loss 0.000000  
epoch 7000, sample 2, loss 0.000000  
epoch 7000, sample 3, loss 0.000000  
epoch 8000, sample 0, loss 0.000000  
epoch 8000, sample 1, loss 0.000000
```

C. 分析

下圖為 loss 和 epoch 之關係圖, 可看出大約 200 epoch 時, loss 便趨近於 0

