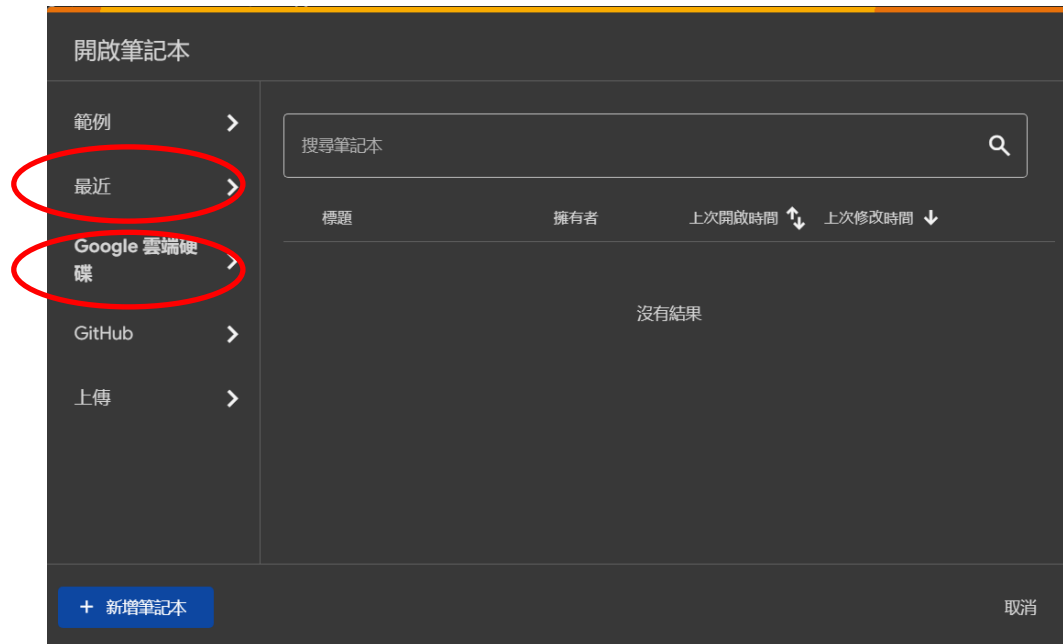




Google Colab Tutorial

Open the desired notebook on Colab

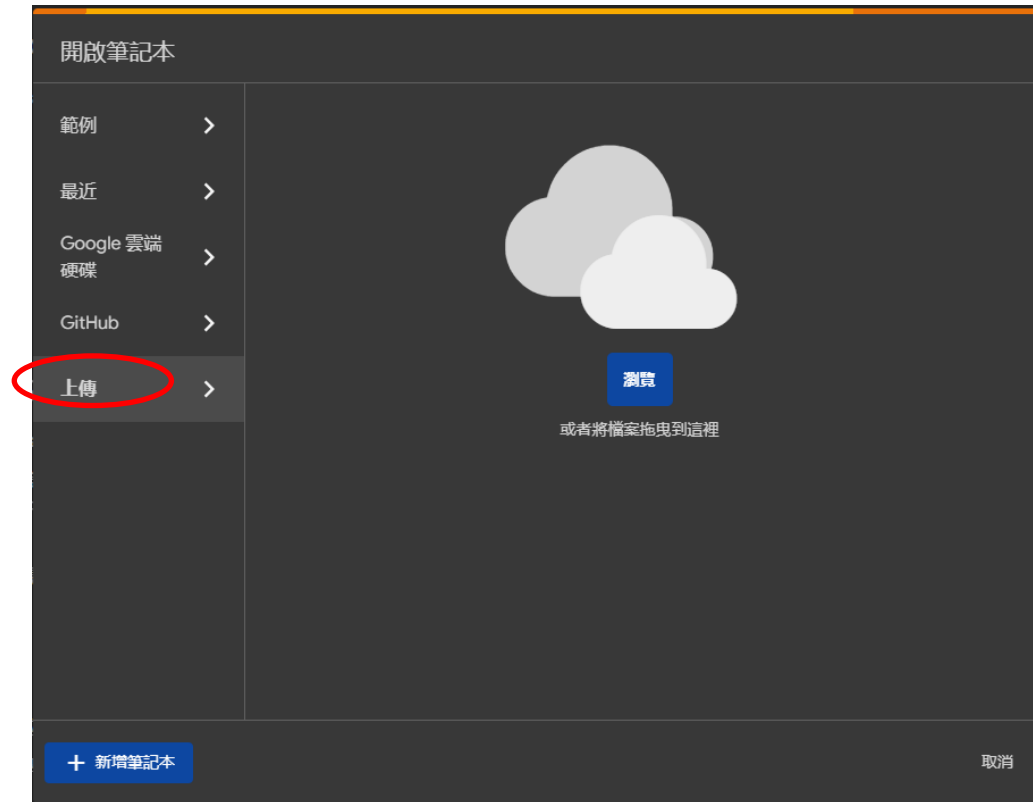
- Unzip the file and upload the whole directory to Google drive first
- <https://colab.research.google.com/?hl=zh-tw>
- If you are using Colab for the first time and find that you cannot open ipynb files, please refer to pages 3 and 4. If you are able to open it, you can skip pages 3 and 4.



You can try these two options to try to locate the files

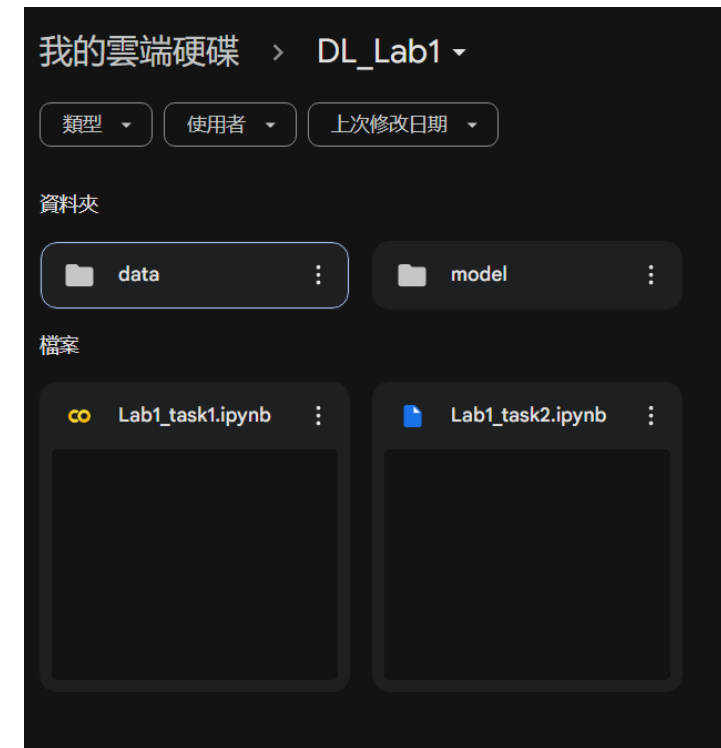
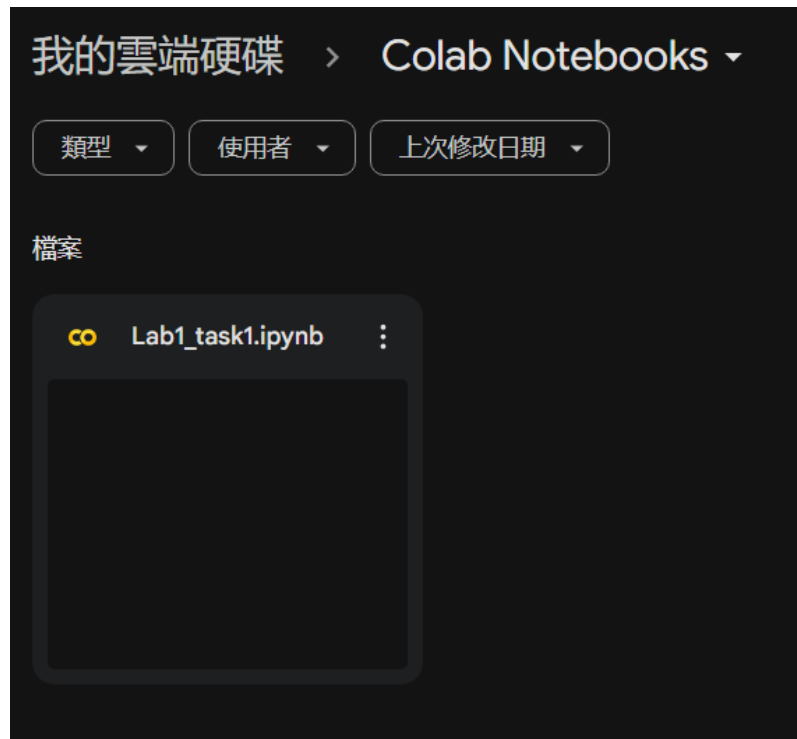
Open the desired notebook on Colab

- Unzip the file and upload it to Google drive first (except ipynb)
- <https://colab.research.google.com/?hl=zh-tw>
- Upload your .ipynb file on colab website

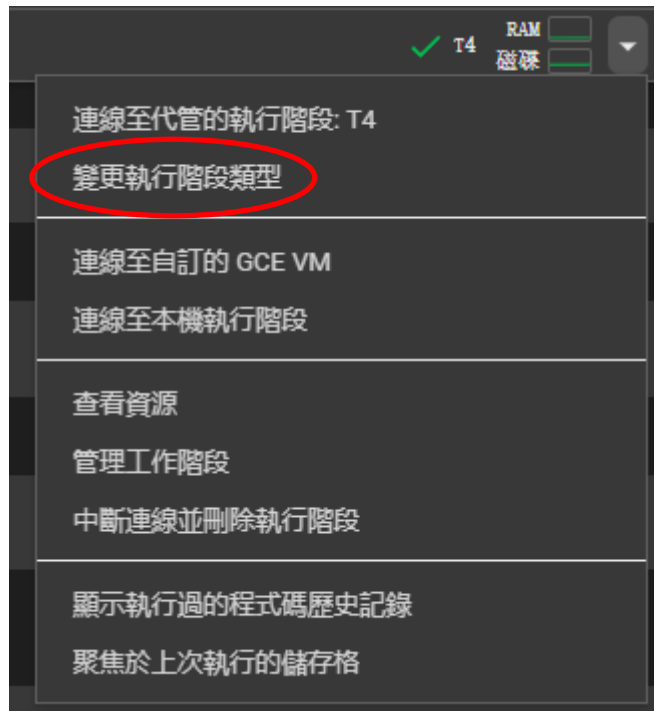


Move ipynb to the same directory as other data

- After you upload your .ipynb file to the Colab website, you may find that your Google Drive has a directory called 'Colab Notebooks'.
- Move the ipynb to the same directory as the other data



Connect to GPU resource



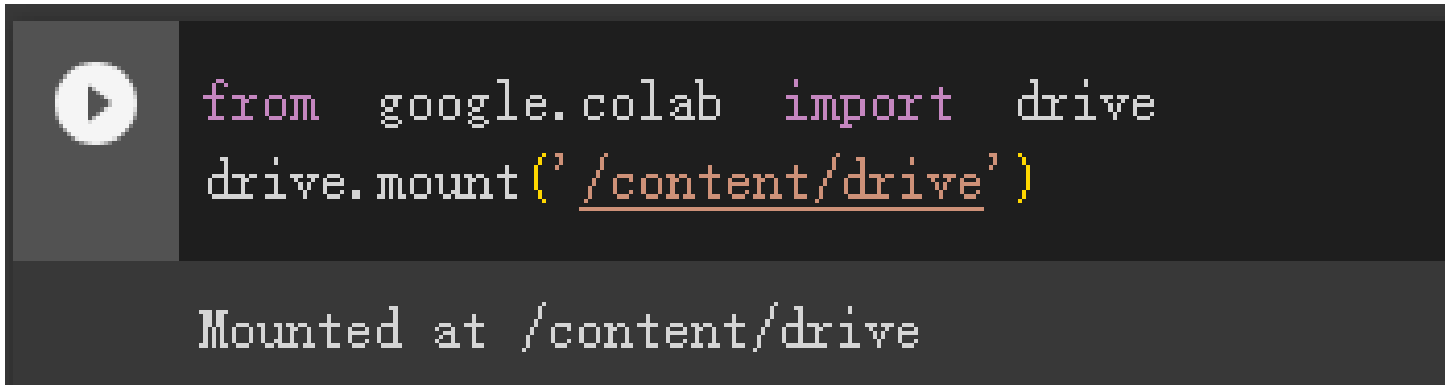
- You can check whether the connection to GPU is set.

```
import torch
torch.cuda.is_available()
```

In Lab1, you can skip this step
You don't need to use GPU in Lab1

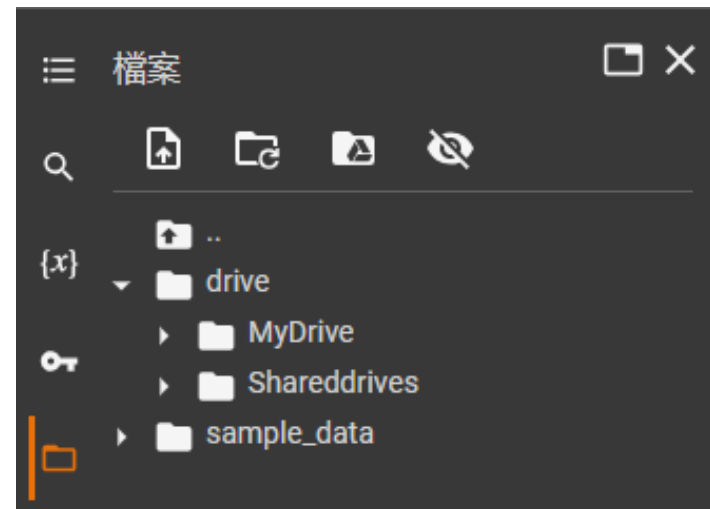
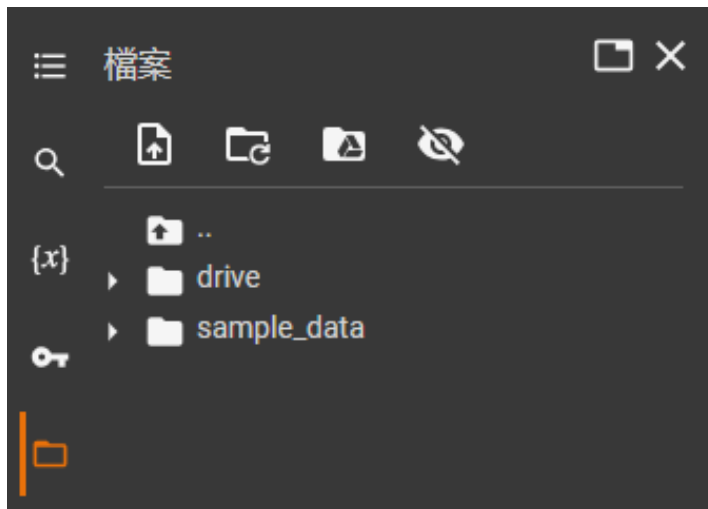
Mount your google drive to notebook

- Insert the following code cell at the top of your code.



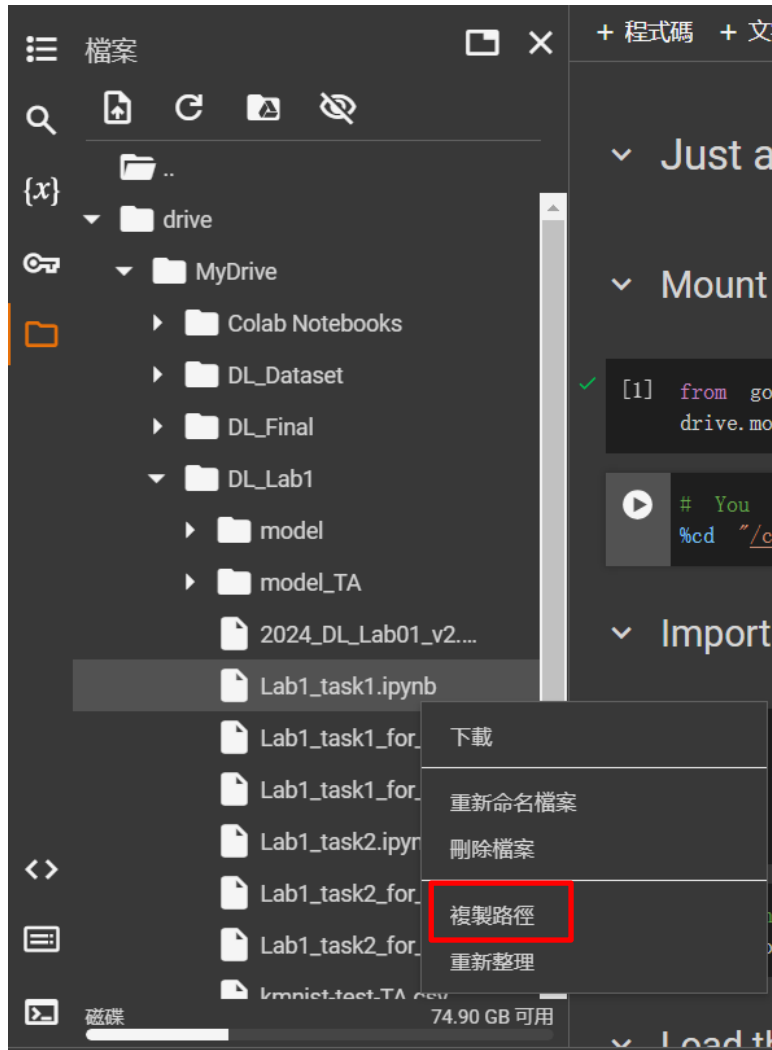
```
from google.colab import drive
drive.mount('/content/drive')
```

Mounted at /content/drive



Go to the directory where the code and dataset is located

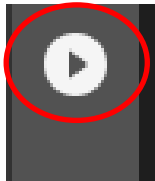
- Either <w> or <w/o> “%” in front of the command of cd is allowed



```
%cd "/content/drive/MyDrive/DL_Lab1/"
```

Run your program

- It's similar to jupyter notebook
- You can run a specific cell



```
from google.colab import drive
drive.mount('/content/drive')
```

- You can also select “run all” to execute all cells

執行階段	工具	說明	上次儲存時間: 9月5日
全部執行		Ctrl+F9	
執行上方的儲存格		Ctrl+F8	
執行聚焦的儲存格		Ctrl+Enter	
執行選取範圍		Ctrl+Shift+Enter	
執行下方的儲存格		Ctrl+F10	
中斷執行		Ctrl+M I	
重新啟動工作階段		Ctrl+M .	
重新啟動工作階段並執行所有儲存格			
中斷連線並刪除執行階段			
變更執行階段類型			
管理工作階段			
查看資源			
查看執行階段記錄			

Reminder

- If you change any of the cells, you need to run the cell you edited before training in order to apply the new settings.
- If you edited layer.py and network.py, you should restart kernel (runtime)
- You can use Google Gemini to help you complete the code



執行階段	工具	說明	上次儲存時間: 9月5日
全部執行			Ctrl+F9
執行上方的儲存格			Ctrl+F8
執行聚焦的儲存格			Ctrl+Enter
執行選取範圍			Ctrl+Shift+Enter
執行下方的儲存格			Ctrl+F10
中斷執行			Ctrl+M I
重新啟動工作階段			Ctrl+M
重新啟動工作階段並執行所有儲存格			
中斷連線並刪除執行階段			
變更執行階段類型			
管理工作階段			
查看資源			
查看執行階段記錄			

Reference

- 常見問題
 - <https://research.google.com/colaboratory/faq.html?hl=zh-cn>
- 長時間執行
 - https://blog.csdn.net/weixin_42722532/article/details/127540028
 - https://blog.csdn.net/weixin_42166222/article/details/123229420