## **DLHLP HW4-3 Report**

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\*1. (2%) Please give some examples predicted correctly and incorrectly respectively. At least one for each case is required. Screenshot recommended.

```
groundtruth predict

"id": "1151-12-2",
"question": "負責將毛巾遞給球員是網球比賽中誰的職責?",
"answers": [
{
    "id": "1",
    "text": "球童",
    "answer_start": 146
},
{
    "id": "151-12-3",
    "question": "網球比賽中在哪一單位的比賽後會有兩分鐘的休息時間?",
    "answers": [
    "id": "1",
    "question": "網球比賽中在哪一單位的比賽後會有兩分鐘的休息時間?",
    "answers": [
    "id": "1",
    "text": "溫",
    "answer_start": 280
},
{
    "id": "2",
    "text": "溫",
    "answer_start": 280
}
}
```

2. (3%) Which hyperparameter(s) should be modified in order to reach better performance? (e.g. learning\_rate, batch\_size, warmup\_steps, layer\_norm\_eps, attention\_probs\_dropout\_prob) ∘

•		learning rate = 1e-5	learning rate = 1e-4
	kaggle public	0.75257	0.71764
	val_f1	0.8099	0.7673

	attention_probs_dropout_prob = 0.1	attention_probs_dropout_prob =0.3
kaggle public	0.75257	0.75807
val_f1	0.8099	0.813

	warmup_steps = 10	warmup_steps = 10000
kaggle public	0.75406	0.75257
val_f1	0.8147	0.8099

上述的實驗結果都是在 finetune bert-base-chinese pretrained model 的結果,我們有調整以上的參數,明顯有差的是 learning rate,在這次 QA 的 task,learning rate 太高會造成結果不好,其餘的參數我們是覺得沒有明顯的上升和降低,我們其實還有調整 max\_seq\_length 從 384 調高到 512在 Roberta pretrained model ,但結果也是變差,我們最後用 <a href="https://github.com/ymcui/Chinese-BERT-wwm">https://github.com/ymcui/Chinese-BERT-wwm</a> 內的 Roberta-wwm-ext-large pretrained model ,才有明顯的進步,kaggle public 從 0.76 上升到 0.80。