

# Roll call system

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簡易流程圖：

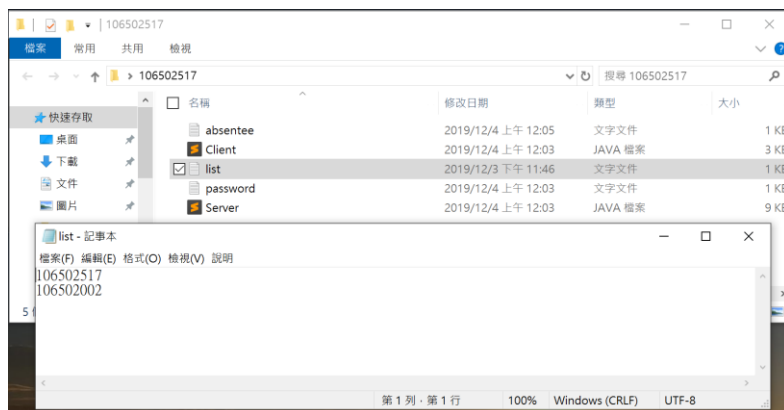


詳細說明：

檔案：Server.java, Client.java, list.txt(修課名單), password.txt(簽到密碼),  
absentee.txt(缺席名單).

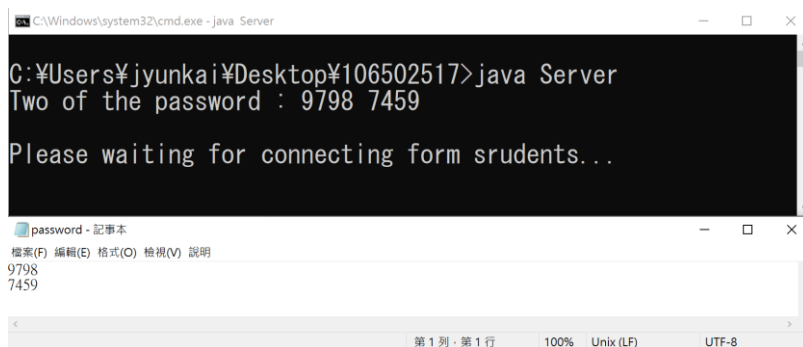
運作流程：

1. 老師儲存修課名單進 list.txt。 - 圖(1)



圖(1)

2. 老師編譯 Server.java 再執行 Server.class，將在 password.txt 獲取相對應學生人數的密碼。列印出來，發放給在場學生。 - 圖(2)  
(此為 demo，故輸出密碼)



```
C:\Windows\system32\cmd.exe - java Server
C:\Users\jyunkai\Desktop\106502517>java Server
Two of the password : 9798 7459

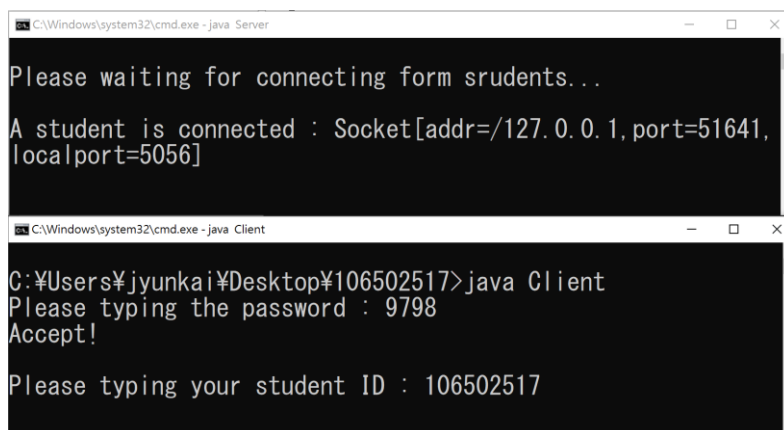
Please waiting for connecting form srudents...
```

password - 記事本  
檔案(F) 編輯(E) 格式(O) 檢視(V) 說明  
9798  
7459

第 1 列 · 第 1 行 100% Unix (LF) UTF-8

圖(2)

3. 學生編譯 Client.java 再執行 Client.class，可輸入三次密碼。  
若正確，Server 將把該 password 刪除，學生則可輸入學號進行簽到 - 圖(3.1)、圖(3.2)；若錯誤達三次，則 Server 端將紀錄該學生 IP，直到關閉 Server 前，該 IP 皆不可再輸入密碼、簽到 - 圖(4.1)、圖(4.2)。

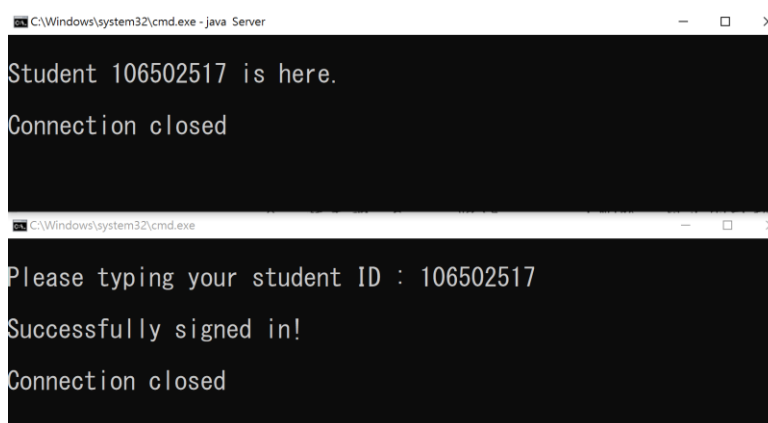


```
C:\Windows\system32\cmd.exe - java Server
Please waiting for connecting form srudents...
A student is connected : Socket[addr=/127.0.0.1,port=51641,localport=5056]
```

```
C:\Windows\system32\cmd.exe - java Client
C:\Users\jyunkai\Desktop\106502517>java Client
Please typing the password : 9798
Accept!

Please typing your student ID : 106502517
```

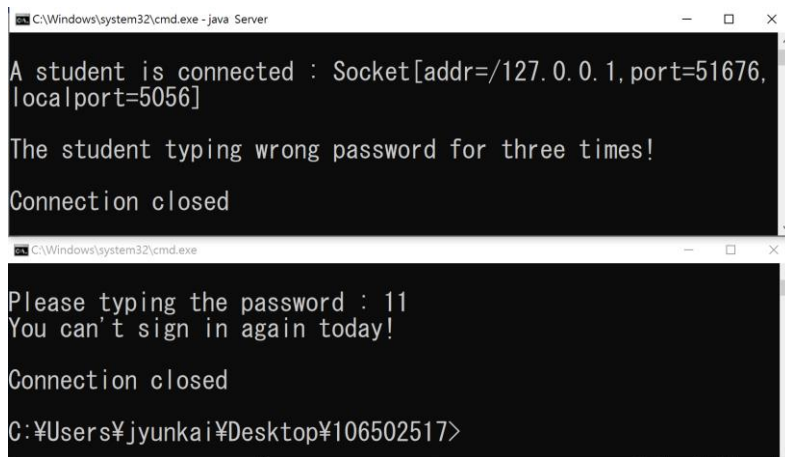
圖(3.1)



```
C:\Windows\system32\cmd.exe - java Server
Student 106502517 is here.
Connection closed
```

```
C:\Windows\system32\cmd.exe
Please typing your student ID : 106502517
Successfully signed in!
Connection closed
```

圖(3.2)



```
C:\Windows\system32\cmd.exe - java Server
A student is connected : Socket[addr=/127.0.0.1,port=51676,
localport=5056]

The student typing wrong password for three times!

Connection closed

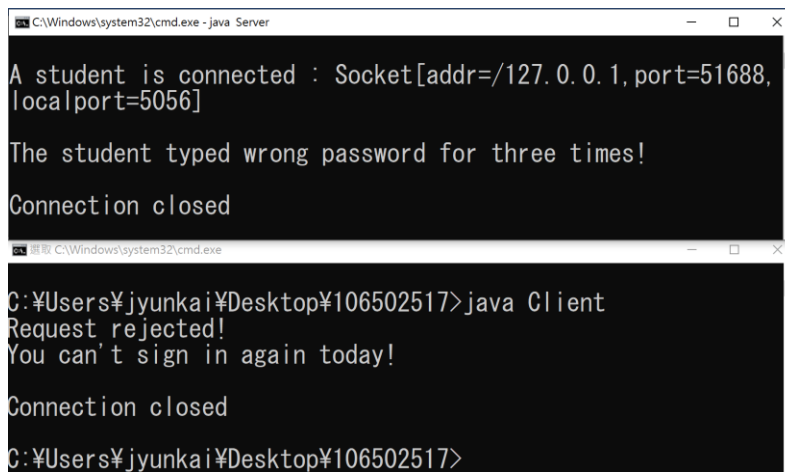
C:\Windows\system32\cmd.exe

Please typing the password : 11
You can't sign in again today!

Connection closed

C:\Users\jyunkai\Desktop\106502517>
```

圖(4.1)



```
C:\Windows\system32\cmd.exe - java Server
A student is connected : Socket[addr=/127.0.0.1,port=51688,
localport=5056]

The student typed wrong password for three times!

Connection closed

C:\Windows\system32\cmd.exe

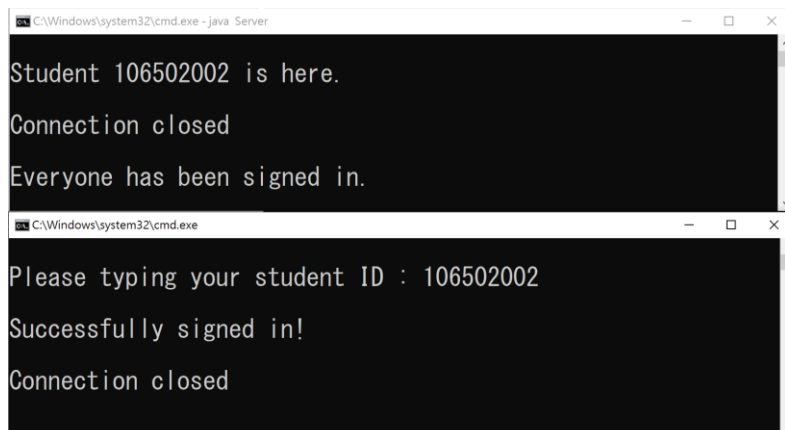
C:\Users\jyunkai\Desktop\106502517>java Client
Request rejected!
You can't sign in again today!

Connection closed

C:\Users\jyunkai\Desktop\106502517>
```

圖(4.2)

4. 若學生已全部簽到，則 Server 端將輸出” Everyone has been signed in.”。
- 若再有學生連線，則關閉 Server，並在 Client 端提醒學生不能再簽到。
- 圖(5.1)、圖(5.2)



```
C:\Windows\system32\cmd.exe - java Server
Student 106502002 is here.

Connection closed

Everyone has been signed in.

C:\Windows\system32\cmd.exe

Please typing your student ID : 106502002
Successfully signed in!

Connection closed
```

圖(5.1)

```

C:\Windows\system32\cmd.exe
A student is connected : Socket[addr=/127.0.0.1,port=51665,
localport=5056]

Close this server.

C:\Users\jyunkai\Desktop\106502517>

C:\Windows\system32\cmd.exe
C:\Users\jyunkai\Desktop\106502517>java Client
Everyone has been signed in.

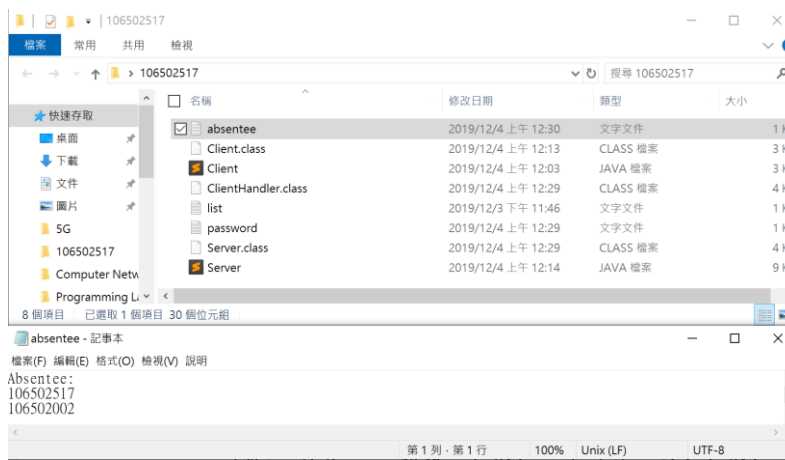
Connection closed

C:\Users\jyunkai\Desktop\106502517>

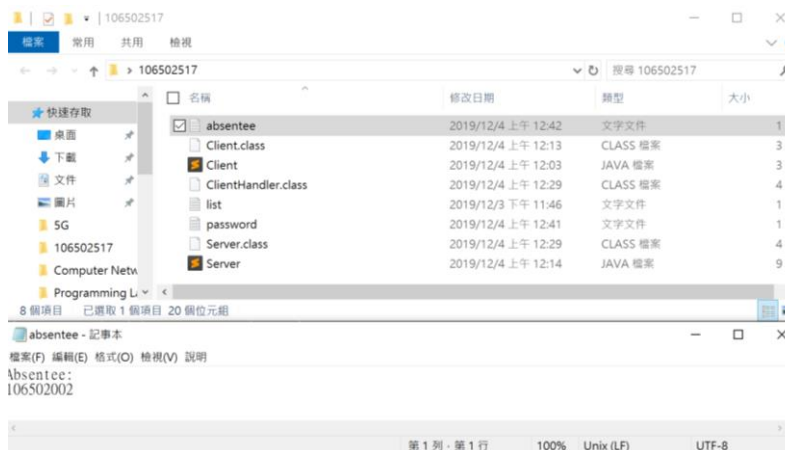
```

圖(5.2)

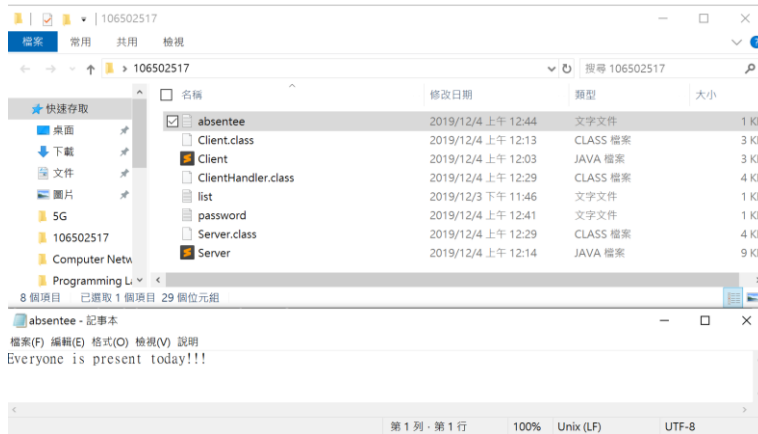
5. 老師可隨時至 absentee.txt 查看缺席名單。 - 圖(6.1)、圖(6.2)、圖(6.3)



圖(6.1)



圖(6.2)



圖(6.3)

\*備註:若 Server 關閉，有 Client 想連線，則會在 Client 端輸出”Teacher close the server, or everyone has been signed in.”。 - 圖(7)



圖(7)