

Exercise #3 Report

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Environment

- OS : macOS Ventura Version 13.4
- compiler version : g++ 2.0.0
- IDE : Visual Studio Code
- how to run :
用 Vscode 開啟程式碼，在terminal內輸入以下兩行
 g++ -o main.exe Exercise3_111550057.cpp
 ./main.exe
即可執行。

Results

- method
 - dynamic programming
 - functions
 - void solve()
 - input tables of each test case
 - store values of the first row of table in vector<int> firstrow
 - store differences between other rows and the first row in vector<vector<int>> table
 - initialize vector<int> memo to store the results of dp
 - do not include the first row
 - void highestScore()
 - update the value of memo by adding 1 subject at a time
 - int maxIncrease()
 - find the maximal score of d days after adding 1 subject
- results of D1

```
tinghsinchuang@zhuangtingxindeMacBook-Pro algorithm hw % cd algo\ ex3
tinghsinchuang@zhuangtingxindeMacBook-Pro algo ex3 % g++ -o main.exe Exercise3_111550057.cpp
tinghsinchuang@zhuangtingxindeMacBook-Pro algo ex3 % ./main.exe
2
4 4
3 4 3 6
6 6 4 7
7 9 8 9
8 11 9 10
2
7
24
5
19
4 3
3 4 3
6 6 4
7 9 8
8 11 9
2
6
18
4
13
```