

## 練習 8 - pull and conflict - 乙

這個練習的目是先修改程式碼，再從伺服器 pull 新的程式碼，但因程式有衝突而 Git 無法自動合併，所以必須進行手動合併後，最後再 push 一份新的程式碼到伺服器，Push 與 Pull 的方式可參考練習 5、6。

1. 將下方程式碼複製到 GitTutorial.cpp，並且 Commit/Push 到伺服器

```
#include "stdafx.h"
#include <string>
#include <iostream>

using namespace System;

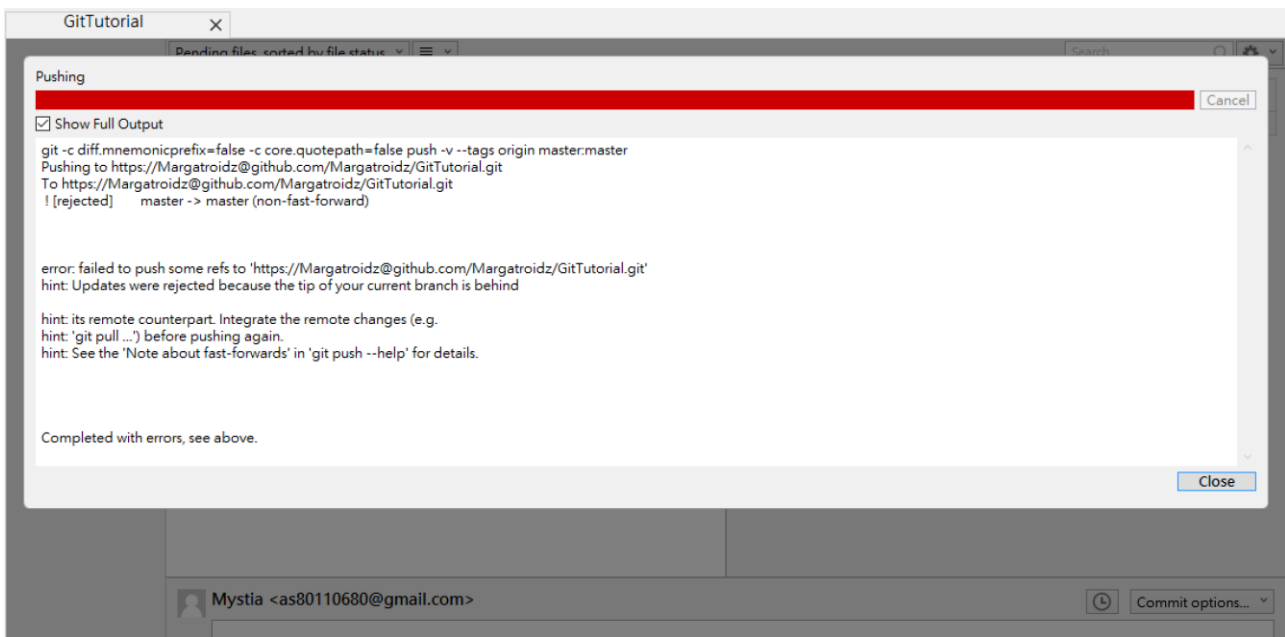
bool Guess(int number) {
    static int target = -1;

    if (target == -1) {
        Random r;
        target = r.Next() % 100 + 1;
    }

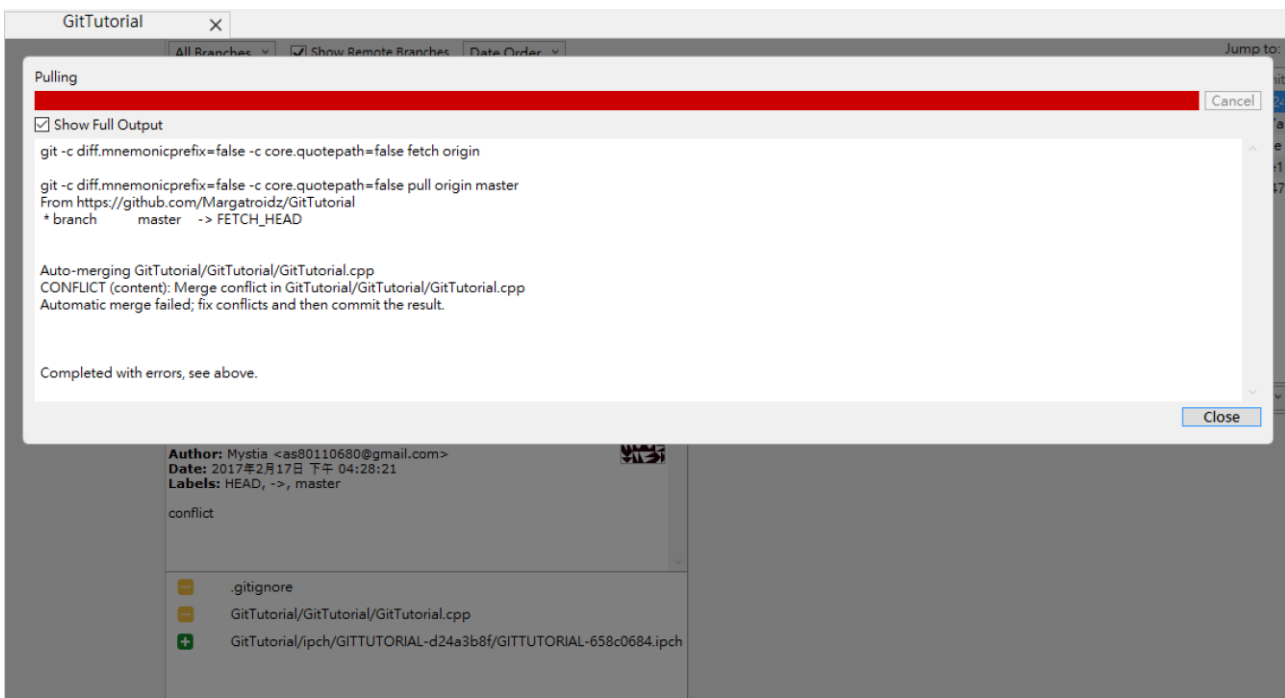
    if (number == target) {
        std::cout << "Correct !!";
        target = -1;
        return true;
    }
    else std::cout << "Wrong" << std::endl;
    return false;
}


int main(array<System::String ^> ^args)
{
    int guess;
    do {
        std::cin >> guess;
    } while (!Guess(guess));
    return 0;
}
```

2. 後 push 的同學會發現 push failed，代表伺服器有新的檔案



3. 這時候再從伺服器 pull 一次，會出現訊息提示發生衝突



4. GitTutorial.cpp 出現 ，到 GitTutorial.cpp，發現 GitTutorial.cpp 會被改成這樣

(上方 HEAD 到=====為伺服器的程式碼片段，=====到下方>> (hash code) 的部分為這次 commit 的程式碼片段，可以提供使用者選擇如何修改)

```
14
15 <<<<<< HEAD
16   if (number == target) {
17       std::cout << "Correct !!";
18       target = -1;
19       return true;
20   }
21   else std::cout << "Wrong" << std::endl;
22   return false;
23   =====
24   if (number > target) {
25       std::cout << "Smaller" << std::endl;
26       return false;
27   }
28   else if (number < target) {
29       std::cout << "Bigger" << std::endl;
30       return false;
31   }
32   return true;
33
34 >>>>>> c21697a173ebd80a9dc8a175e32bd083df37ae5e
```

5. 將下方的程式碼覆蓋到被修改的程式碼上並再次 commit 變更及 push

```
if (number == target) {
    std::cout << "Correct !!";
    target = -1;
    return true;
}
else if (number > target) std::cout << "Smaller" << std::endl;
else if (number < target) std::cout << "Bigger" << std::endl;
return false;
```

## 6. 衝突解決

The screenshot shows the Git GUI interface for a repository named 'GitTutorial'. The main window displays a commit history table with columns for Graph, Description, Date, Author, and Commit. The current commit is highlighted in blue, showing a merge of the 'master' branch from 'https://github.com/Margatroidz/GitTutorial'.

Graph	Description	Date	Author	Commit
	Merge branch 'master' of https://github.com/Margatroidz/GitTutorial	17 二月 2017 16:45	Mystia <as80110i>	89fd9d6
	conflict	17 二月 2017 16:28	Mystia <as80110i>	49dd924
	second commit	17 二月 2017 15:51	ChihChunLiu <zxc>	c21697a
	no message	16 二月 2017 15:28	Mystia <as80110i>	f7835ee
	no message	16 二月 2017 15:21	Mystia <as80110i>	f7d7be1
	Tutorial 2	16 二月 2017 14:44	Mystia <as80110i>	3755847

Below the table, the commit details are shown:

Sorted by file status

Commit: 89fd9d60e5ef41de16bbc460d2ac33bf72dbc91 [89fd9d6]  
Parents: 49dd924d50, c21697a173  
Author: Mystia <as80110680@gmail.com>  
Date: 2017年2月17日 下午 04:49:38  
Labels: HEAD, ->, master, origin/master

Merge branch 'master' of https://github.com/Margatroidz/GitTutorial

# Conflicts:  
# GitTutorial/GitTutorial/GitTutorial.cpp

GitTutorial/.vs/GitTutorial/v14/.suo  
GitTutorial/GitTutorial/GitTutorial.cpp