

韌體實驗第2題

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**BIDAS Technology
GrounTruth Workshop**
Computer Vision
Image Processing
Edge Computing

第二題

淡江大學電機工程學系 106 學年度韌體實驗題目

2. 【TeX 中的引號/TeX Quotes】

在 TeX 中，左雙引號是「`」，右雙引號是「'」。輸入一篇包含雙引號的文章，你的任務是把它轉換成 TeX 的格式。

輸入：

"To be or not to be," quoth the Bard, "that
is the question".

The programming contestant replied: "I must disagree.

To `C' or not to `C', that is The Question!"

輸出：

`To be or not to be,' quoth the Bard, `that
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➤ 將原文之左引號轉換為`，右引號轉換為'。

第二題

需要修改或自行撰寫的部分Line 1-4

```
1  #define _CRT_SECURE_NO_WARNINGS
2  //[TeX中的引號/TeX Quotes]
3  #define IN "P02IN.txt"
4  #define OUT "P02OUT.txt"
5  //*****
6  #include <iostream>
7  #include <ctime>
8  using namespace std;
9  void redir(void);
10 //*****
11 /* Work Space*/
12
13 //*****
14 int main(void)
15 {
16     redir(); //redirection
17 //*****
```

```
31 //*****
32 freopen("CON", "r", stdin); //取消重新導向
33 freopen("CON", "w", stdout);
34
35 printf("Time used = %.2f\n", (double)clock() / CLK_TCK); //傳回程式目前為止執行的時間
36
37 system("pause");
38 return 0; //the end...
39 }
40
41 void redir(void)
42 {
43     freopen(IN, "r", stdin);
44     freopen(OUT, "w", stdout);
45 }
46 //*****
```

第二題

需要修改或自行撰寫的部分

```

18  /* Work Space*/
19  char c;
20  bool flag = true; //true for left, false for right
21
22  while ((c = getchar()) != EOF) {
23      if (c == '(') {
24          printf("%s", flag ? "`" : "'");
25          flag = !flag;
26      }
27      else {
28          printf("%c", c);
29      }
30  }

```

● 解題思考：

- ✓ (1)字元變數、布林變數宣告
- ✓ (2)while迴圈讀取字元設定讀取到EOF停止
- ✓ (3)迴圈內if else修改左右括號或顯示字元
- ✓ (4)左右括號使用布林值控制

● Line 19-20:

- ✓ 宣告字元變數c，接收getchar()得到的字元。
- ✓ 宣告布林變數flag，設定true為左括號，false為右括號。

● Line 22:

- ✓ while迴圈設定條件為如果讀取的字元不是檔案結尾(End of File, EOF)，則執行迴圈。所以就是持續讀取字元到檔案結尾。

● Line 23-29:

- ✓ if else判斷是否為左右括號或是一般字元
- ✓ 如果判斷為左右括號其一，則印出TeX格式之左右括號
- ✓ ?:用法為如果flag為true則執行?後面敘述，如果為false則執行:後面敘述。
- ✓ !為邏輯運算子Not，如果flag為true左括號則下次轉換flag為false右括號，反之亦是。

第二題

P02IN.txt - 記事本

檔案(F) 編輯(E) 格式(O) 檢視(V) 說明

```
"To be or not to be," quoth the Bard, "that
is the question".
The programming contestant replied: "I must disagree.
To `C' or not to `C', that is The Question!"
```

P02OUT.txt - 記事本

檔案(F) 編輯(E) 格式(O) 檢視(V) 說明

```
`"To be or not to be," quoth the Bard, `"that
is the question"'.
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```



Q&A

