

## 一、執行結果

```
User@LEO MINGW64 ~
$ cd /d/Users/User/Desktop/DS_hw5

User@LEO MINGW64 /d/Users/User/Desktop/DS_hw5
$ gcc -std=c11 -o hw5 hw5.c

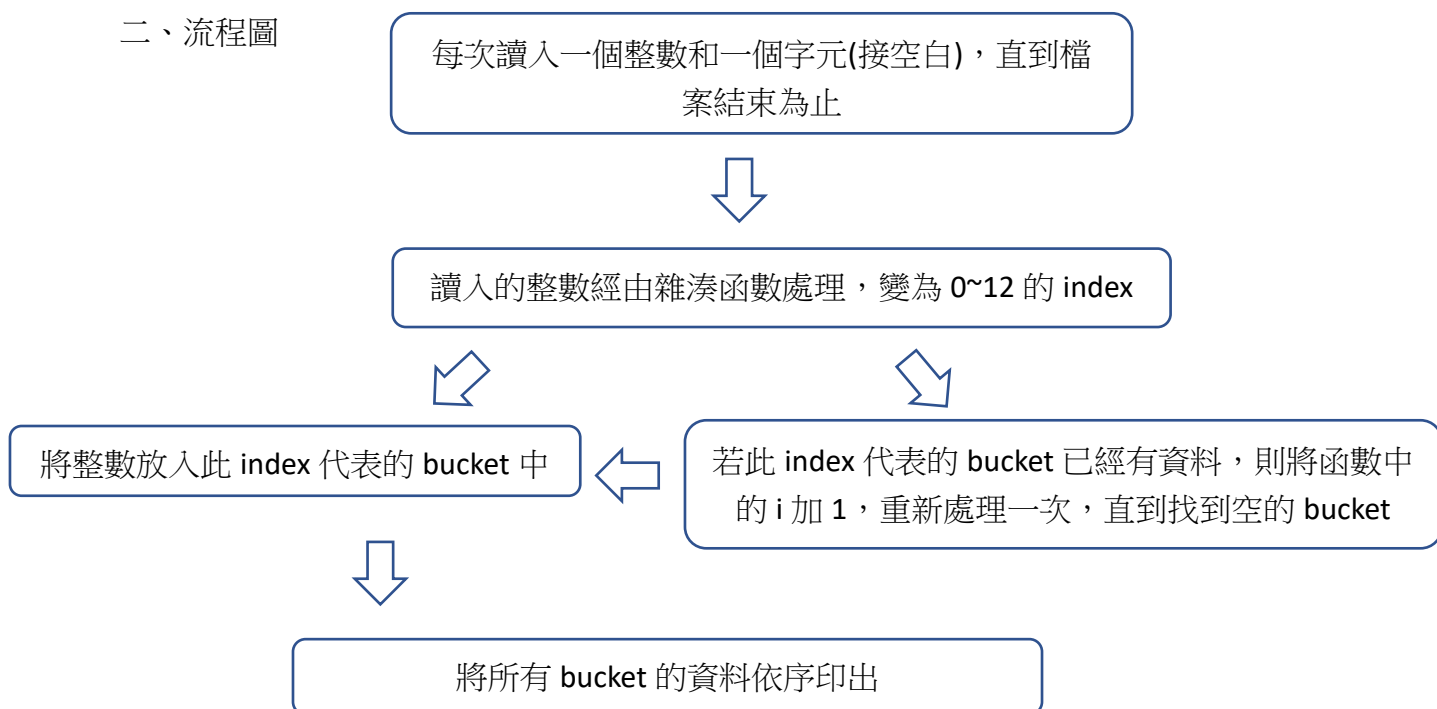
User@LEO MINGW64 /d/Users/User/Desktop/DS_hw5
$ ./hw5.exe < input0_windows.txt > ans_output0_windows.txt

User@LEO MINGW64 /d/Users/User/Desktop/DS_hw5
$ diff ./output0_windows.txt ./ans_output0_windows.txt
```



```
0->77
1->98
2->2
3->37
4->56
5->31
6->45
7->85
8->8
9->70
10->10
11->24
12->64
```

## 二、流程圖



### 三、函式說明

<自創函式> (Hash Function):

◎TABLE\_SIZE 固定為 13

◎PRIME 固定為 7

■ int hash1(int key)

將  $\text{key} \% \text{TABLE\_SIZE}$  的結果回傳

■ int hash2(int key)

將  $\text{PRIME} - (\text{key} \% \text{PRIME})$  的結果回傳

Hash Function:  $\text{index} = (\text{hash1}(\text{key}) + i * \text{hash2}(\text{key})) \% \text{TABLE\_SIZE}$ ,  $i = 0$  initially.