

1. Result screenshot

```
MINGW64/c/Users/user/desktop/Data Structure/HW5
user@LAPTOP-4712GHM0 MINGW64 ~
$ cd 'Data Structure'
bash: cd: Data Structure: No such file or directory
user@LAPTOP-4712GHM0 MINGW64 ~
$ cd desktop
user@LAPTOP-4712GHM0 MINGW64 ~/desktop
$ cd 'Data Structure'
user@LAPTOP-4712GHM0 MINGW64 ~/desktop/Data Structure
$ cd HW5
user@LAPTOP-4712GHM0 MINGW64 ~/desktop/Data Structure/HW5
$ gcc -std=c11 ./hw5.c -o hw5
user@LAPTOP-4712GHM0 MINGW64 ~/desktop/Data Structure/HW5
$ ./hw5.exe < input0_windows.txt > ans_output0_windows.txt
user@LAPTOP-4712GHM0 MINGW64 ~/desktop/Data Structure/HW5
$ diff ./output0_windows.txt ./ans_output0_windows.txt
user@LAPTOP-4712GHM0 MINGW64 ~/desktop/Data Structure/HW5
$
```

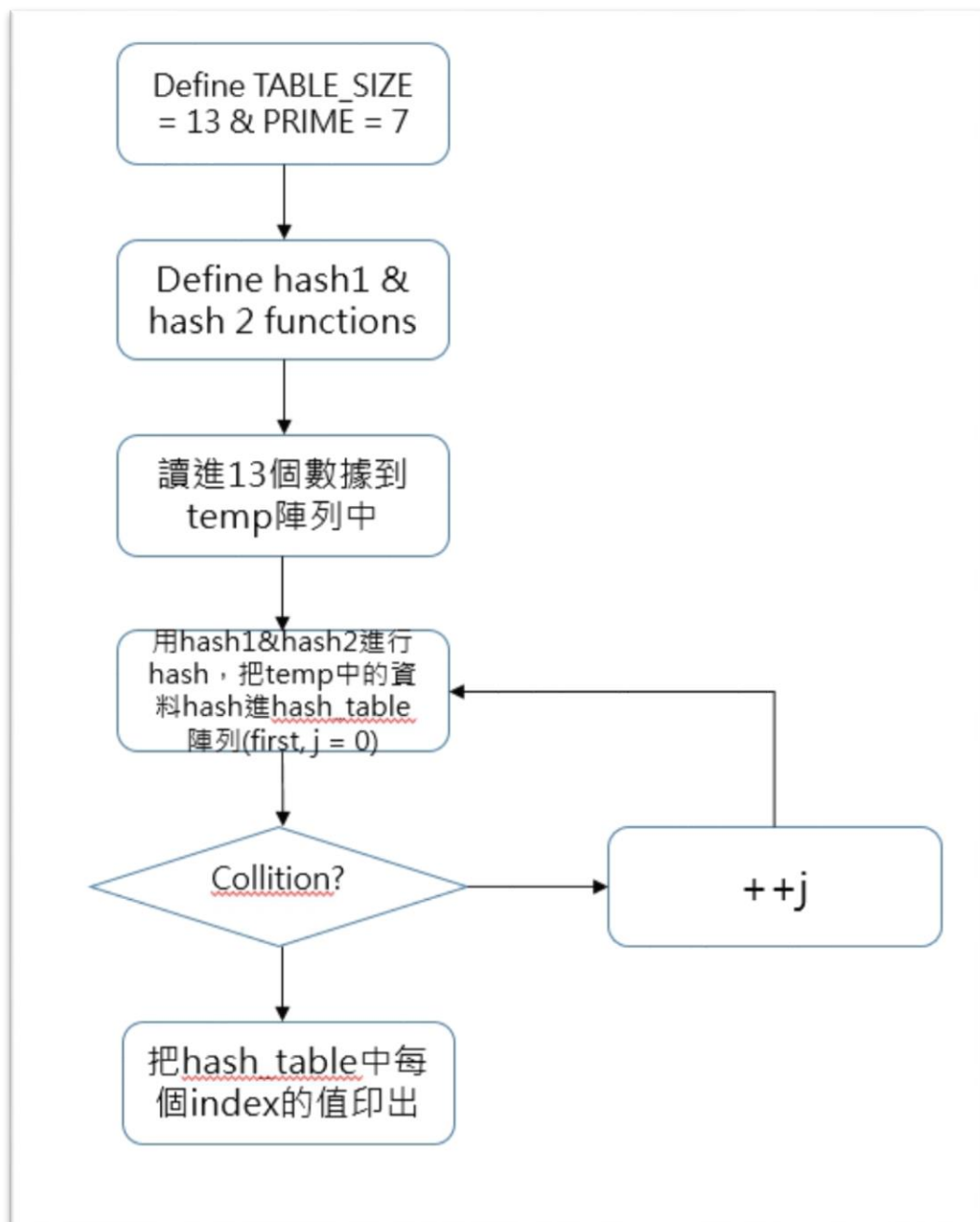
input0_windows.txt - 記事本

```
24 10 31 56 45 85 64 8 77 37 2 98 70
```

ans_output0_windows.txt - 記事本

```
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
```

2. Program structure



3. Program functions

(1)

int hash1(int key):作業指定的hash function1

key – 要進行hash的資料數值

(2)

int hash2(int key):作業指定的hash function2

key – 要進行hash的資料數值