```cpp
/*
    資料結構HWK3字典
        建構字典

    架構
        1.建置資料庫
        2.目標直接搜尋

*/
#include <iostream>
#include <fstream>

#define word_n 57

using namespace std;

struct words
{
    string english_word, chinese_word;
};

struct word_table
{
    int word_total = 0;
    words word[200];
};

void read_date(word_table table_date[])
{
    int id, ch_t = 0;
    string in_english, in_chinese;
    ifstream InF;
    char FName[20], ch;

    cout << "輸入檔名: ";
    cin >> FName;

    InF.open(FName, ios::in);

    if (!InF)
    {
        cout << "檔案無法開啟\n";
        exit(1);
    }
    else
    {
        while (InF.get(ch))
        {
            if (ch_t++ < 20) in_english += ch;
            else if (ch_t++ >= 20 && ch != '\n') in_chinese += ch;
            else if (ch == '\n')
            {
                ch_t = 0;
```

```
54
55                  id = in_english[0] * in_english[1] % word_n;
56                  table_date[id].word[table_date[id].word_total].english_word =
                      in_english;
57                  table_date[id].word[table_date[id].word_total++].chinese_word =
                      in_chinese;
58
59                  //cout << in_english << " " << in_chinese << " id = " << id << endl;
60
61                  in_english = "";
62                  in_chinese = "";
63              }
64          }
65          InF.close();
66      }
67  }
68
69  void print_all(word_table table_date[])
70  {
71      for (int i = 0; i < word_n; i++)
72      {
73          cout << "i = " << i << endl;
74          for (int j = 0; j < table_date[i].word_total; j++)
75          {
76              cout << table_date[i].word[j].english_word;
77              cout << table_date[i].word[j].chinese_word << endl;
78          }
79          cout << endl;
80      }
81  }
82
83  void search(word_table table_date[], string search_word)
84  {
85      bool op = false;
86      int id = search_word[0] * search_word[1] % word_n;
87      for (int i = search_word.size(); i < 20; i++)
88      {
89          search_word += ' ';
90      }
91      for (int j = 0; j < table_date[id].word_total; j++)
92      {
93          if (table_date[id].word[j].english_word == search_word)
94          {
95              op = true;
96              cout << table_date[id].word[j].chinese_word << endl;
97              cout << "共搜尋" << j << "次" << endl;
98          }
99      }
100     if (op == true) cout << "搜尋完成" << endl;
101     else cout << "查無資料" << endl;
102 }
103
104 int main(void)
```

```
105 {
106     string search_word;
107     word_table table_date[word_n];
108 
109     read_date(table_date);
110     //print_all(table_date);
111 
112     bool op = true;
113     while (op != false)
114     {
115         cout << "請輸入要搜尋字串:" << endl;
116         cin >> search_word;
117         search(table_date, search_word);
118         cout << "是否再次使用(y/n)" << endl;
119         string next = "";
120         cin >> next;
121         if (next[0] == 'y' || next[0] == 'Y') op = true;
122         else op = false;
123     }
124 }
```