#include <stdio.h>

#include <string.h>

#include <stdlib.h>

#define MAX\_LINES 100

#define MAX\_LENGTH 100

// 拆分字符串为单词

void split\_and\_count(char \*line, int line\_num, char \*words[][MAX\_LENGTH], int counts[][MAX\_LENGTH], int \*total\_counts) {

char \*token = strtok(line, " ");

while (token!= NULL) {

int i;

for (i = 0; i < MAX\_LENGTH && words[line\_num][i]!= NULL; i++) {

if (strcmp(words[line\_num][i], token) == 0) {

counts[line\_num][i]++;

total\_counts[i]++;

break;

}

}

if (words[line\_num][i] == NULL) {

words[line\_num][i] = strdup(token);

counts[line\_num][i] = 1;

if (total\_counts[i] == NULL) {

total\_counts[i] = 1;

} else {

total\_counts[i]++;

}

}

token = strtok(NULL, " ");

}

}

int main() {

char \*lines[MAX\_LINES];

char \*words[MAX\_LINES][MAX\_LENGTH];

int counts[MAX\_LINES][MAX\_LENGTH];

int total\_counts[MAX\_LENGTH] = {0};

int num\_lines = 0;

char input[MAX\_LENGTH];

while (1) {

fgets(input, MAX\_LENGTH, stdin);

input[strcspn(input, "\n")] = '\0';

if (strcmp(input, "END") == 0) {

break;

}

lines[num\_lines] = strdup(input);

for (int i = 0; i < MAX\_LENGTH; i++) {

words[num\_lines][i] = NULL;

counts[num\_lines][i] = 0;

}

split\_and\_count(lines[num\_lines], num\_lines, words, counts, total\_counts);

num\_lines++;

}

// 输出结果

for (int i = 0; i < num\_lines; i++) {

for (int j = 0; j < MAX\_LENGTH && words[i][j]!= NULL; j++) {

printf("单词: %s 在第 %d 行出现了 %d 次。\n", words[i][j], i + 1, counts[i][j]);

}

}

**for (int i = 0; i < MAX\_LENGTH && total\_counts[i]!= 0; i++) {**

**printf("单词: %s 总共出现了 %d 次。\n", words[0][i], total\_counts[i]);**

**}**

**// 释放内存**

**for (int i = 0; i < num\_lines; i++) {**

**free(lines[i]);**

**for (int j = 0; j < MAX\_LENGTH && words[i][j]!= NULL; j++) {**

**free(words[i][j]);**

**}**

**}**

**return 0;**

**}**