문제해결기법(13967005)

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Q1. Exact Match p.35

#define \_CRT\_SECURE\_NO\_WARNINGS// or scanf\_s

#include <stdio.h>

#include <math.h>

#include <stdlib.h>

#include <string.h>

#include <time.h>

#include <ctype.h>

#define NUM\_TEST\_SET 5

int search\_string(char \*string,char \*search);

int main() {

char test\_str[NUM\_TEST\_SET][1024] = {"Every day for the past month, Emal Ahmadi's 7-year-old daughter Hada has asked him the same thing: ""Where is my sister ?"""

,"She misses playing with her younger sister Malika, he says. She cries a lot, wondering when she is coming home."

,"Malika died in a US drone strike in the courtyard of their family home in Afghanistan's capital on August 29, along with ten other relatives, six of them children."

,"Speaking outside of the courtroom on Thursday, Sarkozy's lawyer Thierry Herzog told French media that he would be launching an appeal."

,"Lambert said he told Sarkozy about the memo and indicated to him the necessity to cut campaign spending, while Sarkozy maintained that he had no knowledge of the overspending."};

char test\_search\_str[NUM\_TEST\_SET][128] = {"the","She","in","the courtroom on Thursday","and indicated to him"};//2, 2, 3, 1, 1

for (int i = 0; i < NUM\_TEST\_SET; i++) {

char\* str = test\_str[i];

char\* search\_str = test\_search\_str[i];

int num\_matches = search\_string(str,search\_str);

printf("\n// --- EXPERIMENT(%d) --- //\n",i+1);

printf("String : %s\n",str);

printf("Search : %s\n",search\_str);

printf("Num Matches : %d\n",num\_matches);

}

return 0;

}

int search\_string(char\* string, char\* search){

int match\_num = 0;

for (int i = 0; i < strlen(string); i++) {

if (string[i]==search[0]) {

int match = 0;

for (int k = 0;k<strlen(search);k++) {

if (string[i + k] == search[k]) {

match++;

}

}

if (match == strlen(search)) {

match\_num++;

}

}

}

return match\_num;

}텍스트이(가) 표시된 사진

자동 생성된 설명텍스트이(가) 표시된 사진

자동 생성된 설명

Q2. Partial Match p.35

#define \_CRT\_SECURE\_NO\_WARNINGS// or scanf\_s

#include <stdio.h>

#include <math.h>

#include <stdlib.h>

#include <string.h>

#include <time.h>

#include <ctype.h>

#define NUM\_TEST\_SET 5

void Divide\_search\_string(char \*search\_str,char \*first,char \*second);

int search\_string(char \*string,char \*search);

int partial\_match\_count(char\* search\_str, char\* first, char\* second);

int main() {

char test\_str[NUM\_TEST\_SET][1024] = {"Every Ever Ever sdgdsfg y"

,"My name is hong gil dong. My brother is hong je dong. My sister is hong gilja, and her friend is hongdong."

,"i sdfsd n i n i in"

,"Speaking outside of the courtroom on Thursday, Sarkozy's lawyer Thierry Herzog told French media that he would be launching an appeal."

,"Lambert said he told Sarkozy about the memo and indicated to him the necessity to cut campaign spending, while Sarkozy maintained that he had no knowledge of the overspending."};

char test\_search\_str[NUM\_TEST\_SET][128] = {"Every","hong\*dong","i\*n","the courtroom\* on Thursday","and indicat\*ed to him"};//2, 2, 3, 1, 1

char first[NUM\_TEST\_SET][128] = { {" "}, {" "}, {" "}, {" "}, {" "}};

char second[NUM\_TEST\_SET][128] = { {" "}, {" "}, {" "}, {" "}, {" "}};

for (int i = 0; i < NUM\_TEST\_SET; i++) {

char\* str = test\_str[i];

char\* search\_str = test\_search\_str[i];

char\* first\_s = first[i];

char\* second\_s = second[i];

printf("\n// --- EXPERIMENT(%d) --- //\n",i+1);

printf("String : %s\n",str);

Divide\_search\_string(search\_str, first\_s, second\_s);

printf("Search-First : %s\n", first\_s);

printf("Search-Second : %s\n", second\_s);

int num\_matches = partial\_match\_count(str, first\_s, second\_s);

printf("Num Matches : %d\n",num\_matches);

}

return 0;

}

void Divide\_search\_string(char\* search\_str, char\* first, char\* second) {

int i = 0;

char \*ptr = strtok(search\_str, "\*");

while (ptr!=NULL) {

if (i == 0) {

strcpy(first,ptr);

}

if (i == 1) {

strcpy(second, ptr);

}

i++;

ptr = strtok(NULL,"\*");

}

printf("");

}

int partial\_match\_count(char\* search\_str, char\* first, char\* second) {

int match\_count = 0;

int each\_match = 0;

for (int i = 0; i < strlen(search\_str);i++) {

//first str

if (search\_str[i] == first[0]&& second[0]!= ' ') {

int match = 0;

for (int k = i; k < i + strlen(first); k++) {

if (search\_str[k] == first[match]) {

match++;

}

}

if (match == strlen(first)) {//first is right

for (int j = i + strlen(first); j < strlen(search\_str); j++) {//find second and the same first

each\_match = 0;

//예외처리

if (search\_str[j] == first[0]) {

int match\_1 = 0;

for (int r = 0; r < strlen(first); r++) {

if (search\_str[j+r] == first[match\_1]) {

match\_1++;

}

else {

match\_1 = 0;

break;

}

}

if (match\_1 == strlen(first)) {

break;//first 중복

}

}

//예외처리

//second str

if (search\_str[j] == second[0]) {

int match\_2 = 0;

for (int n = j; n < j + strlen(second); n++) {

if (search\_str[n] == second[match\_2]) {

match\_2++;

}

else {

match\_2 = 0;

break;

}

}

if (match\_2 == strlen(second)) {

each\_match++;

if (each\_match == 1) {

match\_count++;

}

}

}

}

}

}

else if (search\_str[i] == first[0] && second[0] == ' ') {

int match = 0;

for (int k = i; k < i + strlen(first); k++) {

if (search\_str[k] == first[match]) {

match++;

}

}

if (match == strlen(first)) {

match\_count++;

}

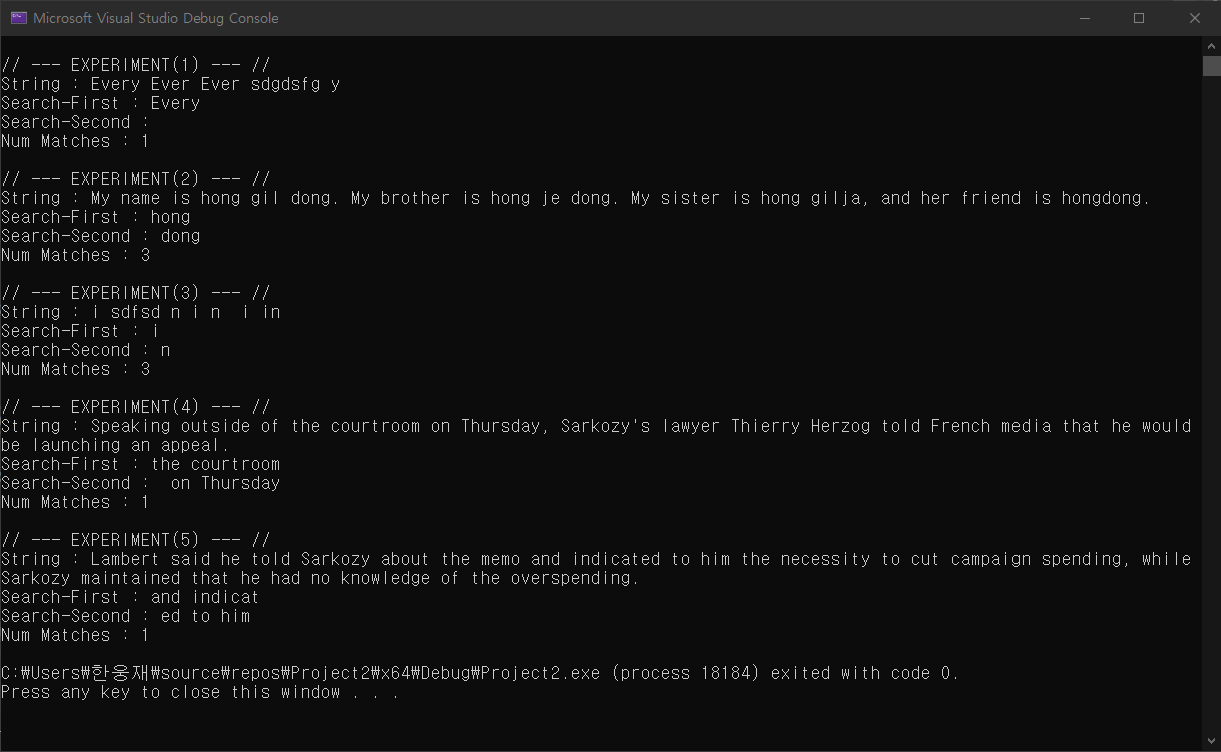
}

}

return match\_count;

}

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자동 생성된 설명

Q3. Index Search p.43

#define \_CRT\_SECURE\_NO\_WARNINGS// or scanf\_s

#include <stdio.h>

#include <math.h>

#include <stdlib.h>

#include <string.h>

#include <time.h>

#include <ctype.h>

#define NUM\_TEST\_SET 3

struct DATASET {

char name[10];

int age;

char hobby[10];

}dataset[5] = { {"Kim",39,"Tennis"},

{"Ko",15,"Soccer"},

{"Lee",17,"Soccer"},

{"Choi",21,"Tennis"},

{"Park",10,"Tennis"}};

struct INDEX {

char key[10];

int index;

}index[5] = { {"Kim",0},

{"Ko",1},

{"Lee",2},

{"Choi",3},

{"Park",4}};

int Search\_Index(char\* search);

int main() {

char test\_search\_keys[NUM\_TEST\_SET][10] = {"Cha","Lee","Park"};

for (int i = 0; i < NUM\_TEST\_SET; i++) {

char\* search\_key = test\_search\_keys[i];

int index = Search\_Index(search\_key);

printf("\n \_-\_-\_Experiment [%d]\_-\_-\_ \n", i + 1);

printf("Key: %s\n", search\_key);

if (index < 0) {

printf("THE KEY DOES NOT EXIST \n");

}

else {

printf("RESULT: INDEX[%d], NAME[%s], AGE[%d], HOBBY[%s] \n", index, dataset[index].name, dataset[index].age, dataset[index].hobby);

}

}

return 0;

}

int Search\_Index(char\* search) {

for (int i = 0; i < 5; i++) {

for (int k = 0; k < strlen(index[i].key); k++) {

if (index[i].key[0] == search[0]) {

int match\_count = 0;

for (int r = 0; r < strlen(search); r++) {

if (index[i].key[r] == search[r]) {

match\_count++;

}

if (match\_count == strlen(index[i].key)) {

return i;

}

}

}

}

}

return -1;

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