컴퓨터학부 20142468 허경영

1. 소스코드

#include <stdio.h>

#include <stdlib.h>

#include <unistd.h>

#include <dirent.h>

#include <limits.h>

#include <string.h>

#include <sys/stat.h>

#include "calTime.h"

#ifdef PATH\_MAX

static int pathmax = PATH\_MAX;

#else

static int pathmax = 0;

#endif

#define MAX\_PATH\_GUSSED 1024

#ifndef LINE\_MAX

#define LINE\_MAX 2048

#endif

char \*pathname;

char command[LINE\_MAX], grep\_cmd[LINE\_MAX];

int ssu\_do\_grep(void){

struct dirent \*dirp;

struct stat statbuf;

char \*ptr;

DIR \*dp;

if(lstat(pathname, &statbuf) < 0){

fprintf(stderr, "lstat error for %s\n",pathname);

return 0;

}

if(S\_ISDIR(statbuf.st\_mode) == 0){

sprintf(command, "%s %s", grep\_cmd, pathname);

printf("%s : \n", pathname);

system(command);

return 0;

}

ptr = pathname + strlen(pathname);

\*ptr++ = '/';

\*ptr = '\0';

if((dp = opendir(pathname)) == NULL){

fprintf(stderr, "opendir error for %s\n", pathname);

return 0;

}

while((dirp = readdir(dp)) != NULL){

if(strcmp(dirp->d\_name, ".") && strcmp(dirp->d\_name, "..")){

strcpy(ptr, dirp->d\_name);

if(ssu\_do\_grep() < 0)

break;

}

}

ptr[-1] = 0;

closedir(dp);

return 0;

}

void ssu\_make\_grep(int argc, char \*argv[]){

int i;

strcpy(grep\_cmd, " grep");

for(i = 1; i < argc - 1; i++){

strcat(grep\_cmd, " ");

strcat(grep\_cmd, argv[i]);

}

}

int main(int argc, char \* argv[]){

struct timeval begin\_t, end\_t;

if(argc < 2){

fprintf(stderr, "usage: %s <-CVbchilnsvwx> <-num> <-A num> <-B num> <-f file>\n"

" <-e> expr <directory>\n", argv[0]);

exit(1);

}

if(pathmax == 0){

if((pathmax = pathconf("/", \_PC\_PATH\_MAX)) < 0)

pathmax = MAX\_PATH\_GUSSED;

else

pathmax++;

}

if((pathname = (char \*) malloc(pathmax + 1)) == NULL){

fprintf(stderr, "malloc error\n");

exit(1);

}

strcpy(pathname, argv[argc - 1]);

ssu\_make\_grep(argc, argv);

ssu\_do\_grep();

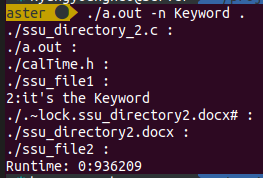
gettimeofday(&begin\_t, NULL);

gettimeofday(&end\_t, NULL);

ssu\_runtime(&begin\_t, &end\_t);

exit(0);

}

2. 실행결과