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1. 소스코드

<ssu\_read\_3A.c>

#include <stdio.h>

#include <stdlib.h>

#include <unistd.h>

#include <fcntl.h>

#include <sys/time.h>

#define SEC\_TO\_MICRO 1000000

int main(void){

struct timeval begin\_t, end\_t;

char c;

int fd;

gettimeofday(&begin\_t, NULL);

if((fd = open("ssu\_test.txt", O\_RDONLY)) < 0){

fprintf(stderr, "open error for %s\n","ssu\_test.txt");

exit(1);

}

while(1){

if(read(fd, &c, 1) > 0){ // fd에서 읽은 바이트가 있으면

putchar(c); // c를 출력

}

else

break;

}

gettimeofday(&end\_t, NULL);

end\_t.tv\_sec -= begin\_t.tv\_sec;

if(end\_t.tv\_usec < begin\_t.tv\_usec){

end\_t.tv\_sec--;

end\_t.tv\_usec += SEC\_TO\_MICRO;

}

end\_t.tv\_usec -= begin\_t.tv\_usec;

printf("Runtime: %ld:%ld\n",end\_t.tv\_sec, end\_t.tv\_usec);

exit(0);

}

<ssu\_read\_3B.c>

#include <stdio.h>

#include <stdlib.h>

#include <unistd.h>

#include <fcntl.h>

#include <sys/time.h>

#define SEC\_TO\_MICRO 1000000

int main(void){

struct timeval begin\_t, end\_t;

char ch;

int fd;

int line\_count = 0;

gettimeofday(&begin\_t, NULL);

if((fd = open("ssu\_test.txt", O\_RDONLY)) < 0){

fprintf(stderr, "open error for %s\n","ssu\_test.txt");

exit(1);

}

while(1){

if(read(fd, &ch, 1) > 0){

if(ch == '\n'){ // \n을 만나면 line\_count 증가

line\_count++;

}

}

else

break;

}

printf("Total line : %d\n",line\_count);

gettimeofday(&end\_t, NULL);

end\_t.tv\_sec -= begin\_t.tv\_sec;

if(end\_t.tv\_usec < begin\_t.tv\_usec){

end\_t.tv\_sec--;

end\_t.tv\_usec += SEC\_TO\_MICRO;

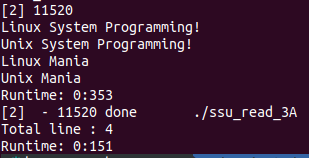
}

end\_t.tv\_usec -= begin\_t.tv\_usec;

printf("Runtime: %ld:%ld\n",end\_t.tv\_sec, end\_t.tv\_usec);

exit(0);

}

2. 실행결과