컴퓨터학부 20142468 허경영

1. 소스코드

<ssu\_read\_1.c>

#include <stdio.h>

#include <stdlib.h>

#include <unistd.h>

#include <fcntl.h>

#include "ssu\_employee.h"

#include <sys/time.h>

#define SEC\_TO\_MICRO 1000000

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

struct timeval begin\_t, end\_t;

struct ssu\_employee record;

int fd;

int record\_num;

gettimeofday(&begin\_t, NULL);

if(argc < 2){

fprintf(stderr, "Usage : %s file\n", argv[0]);

exit(1);

}

if((fd = open(argv[1], O\_RDONLY)) < 0){

fprintf(stderr, "open error for %s\n", argv[1]);

exit(1);

}

while(1){

printf("Enter record number : ");

scanf("%d", &record\_num);

if(record\_num < 0) // -1 이면 끝

break;

if(lseek(fd, (long)record\_num \* sizeof(record), 0) < 0){ // record num \* record 크기 만큼 lseek

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

exit(1);

}

if(read(fd, (char \*)&record, sizeof(record)) > 0){ // 해당하는 record 를 read

printf("Employee : %s Salary : %d\n", record.name, record.salary);

}

else{ // 못찾은 경우

printf("Record %d not found\n",record\_num);

}

}

close(fd);

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\_employee.h>

#define NAME\_SIZE 64

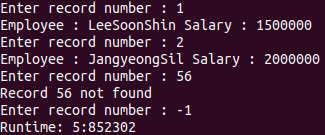
struct ssu\_employee {

char name[NAME\_SIZE];

int pid;

int salary;

};

2. 실행결과