컴퓨터학부 20142468 허경영

1. 소스코드

#include <stdio.h>

#include <stdlib.h>

#include <unistd.h>

#include <pthread.h>

#include <string.h>

#define THREAD\_NUM 8

struct thread\_data {

int thread\_index;

int sum;

char \*message;

};

void \*ssu\_printhello(void \*arg);

struct thread\_data thread\_data\_array[THREAD\_NUM];

char \*messages[THREAD\_NUM];

int main(void){

pthread\_t tid[THREAD\_NUM];

int sum, i;

sum = 0;

messages[0] = "English: Hello World!";

messages[1] = "French: Bonjour, le monde!";

messages[2] = "Spanish: Hola al mundo!";

messages[3] = "Klingon: Nuq neH!";

messages[4] = "German: Guten Tag, Welt!";

messages[5] = "Russian: Zdravstvytye, mir!";

messages[6] = "Japan: Sekai e konnichiwa!";

messages[7] = "Latin: Orbis, te saluto!";

for(i=0; i<THREAD\_NUM; i++){

sum = sum += i;

thread\_data\_array[i].thread\_index = i;

thread\_data\_array[i].sum = sum;

thread\_data\_array[i].message = messages[i];

printf("Creating thread %d\n", i);

if(pthread\_create(&tid[i], NULL, ssu\_printhello, (void \*)&thread\_data\_array[i]) != 0){

fprintf(stderr, "pthread\_Create error\n");

exit(1);

}

}

sleep(5);

exit(0);

}

void \*ssu\_printhello(void \*arg){ // 쓰레드에서 실행하는 함수

struct thread\_data \*data;

char \*message;

int thread\_index;

int sum;

sleep(1);

data = (struct thread\_data\*)arg;

thread\_index = data->thread\_index;

sum = data->sum;

message = data->message;

printf("Thread %d: %s Sum=%d\n", thread\_index, message, sum);

return NULL;

}

2. 실행결과