#include <pthread.h>

#include <stdio.h>

#define NTHREADS 5

#define COUNT 5000

static pthread\_mutex\_t semB;

void \*inc\_x(void \*x\_void\_ptr)

{

int \*x\_ptr = (int \*)x\_void\_ptr;

pthread\_mutex\_lock(&semB);

(\*x\_ptr)++;

pthread\_mutex\_unlock(&semB);

return NULL;

}

int main()

{

static int x = 0;

pthread\_t tid[NTHREADS];

pthread\_mutex\_init(&semB, NULL);

printf("Initial value of x: %d\n", x);

for(int i=0;i<NTHREADS;i++)

{

if(pthread\_create(&tid[i], NULL, inc\_x, &x))

{

fprintf(stderr, "Error creating thread\n");

return 1;

}

}

// Wait for the other threads to finish.

for (int i = 0; i < NTHREADS; i++)

pthread\_join(tid[i], NULL);

printf("Final value of x: %d\n",x);

return 0;

}