//two threads to prin t even and odd series

#include <pthread.h>

#include <stdio.h>

#include <stdlib.h>

int MAX = 100;

volatile int count = 0;

pthread\_mutex\_t mutex;

pthread\_cond\_t cond;

void \*printEvenNum(void \*arg)

{

while(count < MAX)

{

pthread\_mutex\_lock(&mutex);

while(count % 2 != 0)

{

pthread\_cond\_wait(&cond, &mutex);

}

printf("%d ", count++);

pthread\_mutex\_unlock(&mutex);

pthread\_cond\_signal(&cond);

}

pthread\_exit(0);

}

void \*printOddNum(void \*arg)

{

while(count < MAX)

{

pthread\_mutex\_lock(&mutex);

while(count % 2 != 1)

{

pthread\_cond\_wait(&cond, &mutex);

}

printf("%d ", count++);

pthread\_mutex\_unlock(&mutex);

pthread\_cond\_signal(&cond);

}

pthread\_exit(0);

}

int main()

{

pthread\_t thread1;

pthread\_t thread2;

pthread\_mutex\_init(&mutex, 0);

pthread\_cond\_init(&cond, 0);

pthread\_create(&thread1, 0, &printEvenNum, NULL);

pthread\_create(&thread2, 0, &printOddNum, NULL);

pthread\_join(thread1, 0);

pthread\_join(thread2, 0);

pthread\_mutex\_destroy(&mutex);

pthread\_cond\_destroy(&cond);

return 0;

}

Output:

