

1. Write a multithreaded Pthread program that outputs if a number is palindrome or not. This program should work as follows. The user will enter some numbers on the command line and execute the program. The program will then create a separate thread for each of these numbers that will tell if the number is palindrome or not.
2. Write a multithreaded Pthread program that outputs the sum of 'n' numbers. This program should work as follows. The user will first enter the value of 'n' and then the 'n' numbers. The program terminates when n is -1. The program should create a separate thread for summing each group of 'n' numbers and output the sum.
3. Using threads to solve a simple Reader-Writer problem. You need to create several (take as input) threads and each of these threads will add one to a global variable. The value at the end of the execution has to be consistent with the no. of threads executed.

Hint: Thread Synchronization using mutexes

Header file <pthread.h>

For compiling : `cc -lpthread <filename>`