

Assignment 4

1 Exercise with Threads

Write a program that creates two threads. Thread 1 must print the **even** numbers (from 2 to 10) with the message: *th1:number*. Thread 2 must print the **odd** numbers (from 1 to 9) with the message: *th2:number*.

The program must print the numbers:

- i) In the first case, the numbers from the first thread and then the numbers from the second. Example:

```
th1: 1
th1: 3
th1: 5
th1: 7
th1: 9
th2: 2
th2: 4
th2: 6
th2: 8
th2: 10
```

- ii) In increasing order by alternating the two threads. Example:

```
th1: 1
th2: 2
th1: 3
th2: 4
th1: 5
th2: 6
th1: 7
th2: 8
th1: 9
th2: 10
```

Additional Information

<https://www.geeksforgeeks.org/mutex-lock-for-linux-thread-synchronization/>

<https://pubs.opengroup.org/onlinepubs/007908799/xsh/pthread.h.html>

<https://www.thegeekstuff.com/2012/05/c-mutex-examples/>

http://www.cs.kent.edu/~ruttan/sysprog/lectures/multi-thread/pthread_cond_init.html