

Thraed

Task 03

```
public class Counter {  
    private int count = 0;  
  
    // Synchronized method to ensure thread-safe access to the counter  
    public synchronized void increment() {  
        count++;  
    }  
  
    public int getCount() {  
        return count;  
    }  
}  
  
public class SynchronizedExample extends Thread {  
    private Counter counter;  
  
    public SynchronizedExample(Counter counter) {  
        this.counter = counter;  
    }  
  
    @Override  
    public void run() {  
        for (int i = 0; i < 1000; i++) {  
            counter.increment();  
        }  
    }  
}  
  
    public static void main(String[] args) throws InterruptedException {
```

```

Counter counter=new Counter();

// Create and start multiple threads

Thread thread1 = new SynchronizedExample(counter);

Thread thread2 = new SynchronizedExample(counter);

thread1.start();

thread2.start();

// Wait for threads to finish

thread1.join();

thread2.join();

System.out.println("Final counter value: " + counter.getCount());
}

}

```

Output

