Condition Variables

Condition variables allow threads to wait for certain conditions to be met.

The wait() method makes a thread wait until another thread invokes notify() or notifyAll() on the same object.

*public class* ConditionExample {  
  
 *// Condition variables allow threads to wait for certain conditions to be met.  
 // The wait() method makes a thread wait until another thread invokes notify() or notifyAll()  
 // on the same object.  
  
 private static final* Object *lock* = *new* Object();  
 *private static boolean dataReady* = *false*;  
  
 *public static void* main(String[] args) *throws* InterruptedException {  
 Thread producer = *new* Thread(() -> {  
 *synchronized* (*lock*) {  
 *dataReady* = *true*;  
 *lock*.notifyAll();  
 }  
 });  
  
 Thread consumer = *new* Thread(() -> {  
 *synchronized* (*lock*) {  
 *while* (!*dataReady*) {  
 *try* {  
 System.*out*.println("Waiting for data...");  
 *lock*.wait();  
 } *catch* (InterruptedException e) {  
 Thread.*currentThread*().interrupt();  
 }  
 }  
 System.*out*.println("Data is ready!");  
 }  
 });  
  
 consumer.start();  
 Thread.*sleep*(1000); *// Ensure consumer is waiting* producer.start();  
  
 producer.join();  
 consumer.join();  
 }  
}

Waiting for data...

Data is ready!