	Main	Thread 1	Thread 2	Thread 3	Thread 4
Transition 0-25	A Queue is starting to be initialised.				
Transition 26	The Queue initialises and one Producer is starting to be initialised.				
Transition 27	A byte array is initialised, the Producer constructor returns and the Producer thread is started.				
Transition 28	One Consumer is starting to be initialised.				
Transition 29-30	The Consumer thread is started.				
Transition 31	Another Producer is starting to be initialised.				
Transition 32	A byte array is initialised, the Producer constructor returns and the Producer thread is started.				
Transition 33-34	The Consumer thread is started.				
Transition 35	Exit the for loop.				
Transition 36		Try to put the data array on the queue.			
Transition 37			Initialise result byte array and try to remove data from queue and put it in result.		
Transition 38			Still trying calling the remove function.		
Transition 39			Enters the remove function.		
Transition 40-42			Stuck waiting for something to remove from queue.		
Transition 43-44				Try to put the data array on the queue.	
Transition 45					Initialise result byte array and try to remove data from queue and put it in result.
Transition 46					Still trying calling the remove function.
Transition 47					Enters the remove function but gets stuck waiting for something to remove.
Transition 48-50		Puts the data on the queue and notifies other threads.			
Transition 51				Enters the put function but is stuck waiting for space.	