

# Missed Signals

## Missed Signals

A missed signal happens when a signal is sent by a thread before the other thread starts waiting on a condition. This is exemplified by the following code snippet. Missed signals are caused by using the wrong concurrency constructs. In the example below, a condition variable is used to coordinate between the **signaller** and the **waiter** thread. The condition is signaled at a time when no thread is waiting on it causing a missed signal.

In later sections, you'll learn that the way we are using the condition variable's `await` method is incorrect. The idiomatic way of using `await` is in a while loop with an associated boolean condition. For now, observe the possibility of losing signals between threads.

	Thre
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	



```
41
42
43
44     });
45
46     sign
47     sign
48
49     wait
50     wait
51
52     Syst
53 }
54 }
55
```



### Missed Signal Example



The above code when ran, will never print the statement **Program Exiting** and execution would time out. Apart from refactoring the code to match the idiomatic usage of condition variables in a while loop, the other possible fix is to use a **semaphore** for signalling between the two threads as shown below





```
1  import java.
2
3  class Demons
4
5      public s
6          Fixe
7      }
8  }
9
10 class FixedM
11
12     public s
13
14     fina
```




15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Thre  
  
  
  
  
  
});  
  
Thre





Fixed Missed Signal

Interviewing soon? We've partnered with Hired so that companies apply to you  
[utm\\_source=educative&utm\\_medium=lesson&utm\\_location=CA&utm\\_campaign=hired](https://www.educative.io/courses/java-multithreading-for-senior-engineering-interviews/qVQEWgLOxIG?utm_source=educative&utm_medium=lesson&utm_location=CA&utm_campaign=hired)  


 BackNext 

Reentrant Locks &amp; Condition Variables

Semaphore in Java

☒ Mark as CompletedReport an  
Issue

Ask a Question

(https://discuss.educative.io/tag/missed-signals\_\_multithreading-in-java\_\_java-multithreading-for-senior-engineering-interviews)

