8) List different states in life cycle of a thread.

A thread in Java at any point of time exists in any one of the following states. A thread lies only in one of the shown states at any instant:

1. New
2. Runnable
3. Running
4. Non-Runnable (Blocked)
5. Terminated

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| **New**The thread is in new state if you create an instance of Thread class butbefore the invocation of start () method. |

### **Runnable**

### The thread is in runnable state after invocation of start () method, but the thread scheduler has not selected it to be the running thread.

### **Running**

### The thread is in running state if the thread scheduler has selected it.

1. **Non-Runnable (Blocked)**

This is the state when the thread is still alive, but is currently not eligible to run.

1. **Terminated**

A thread is in terminated or dead state when its run () method exits.