Department: BCA
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Subject: JAVA (5th sem.)
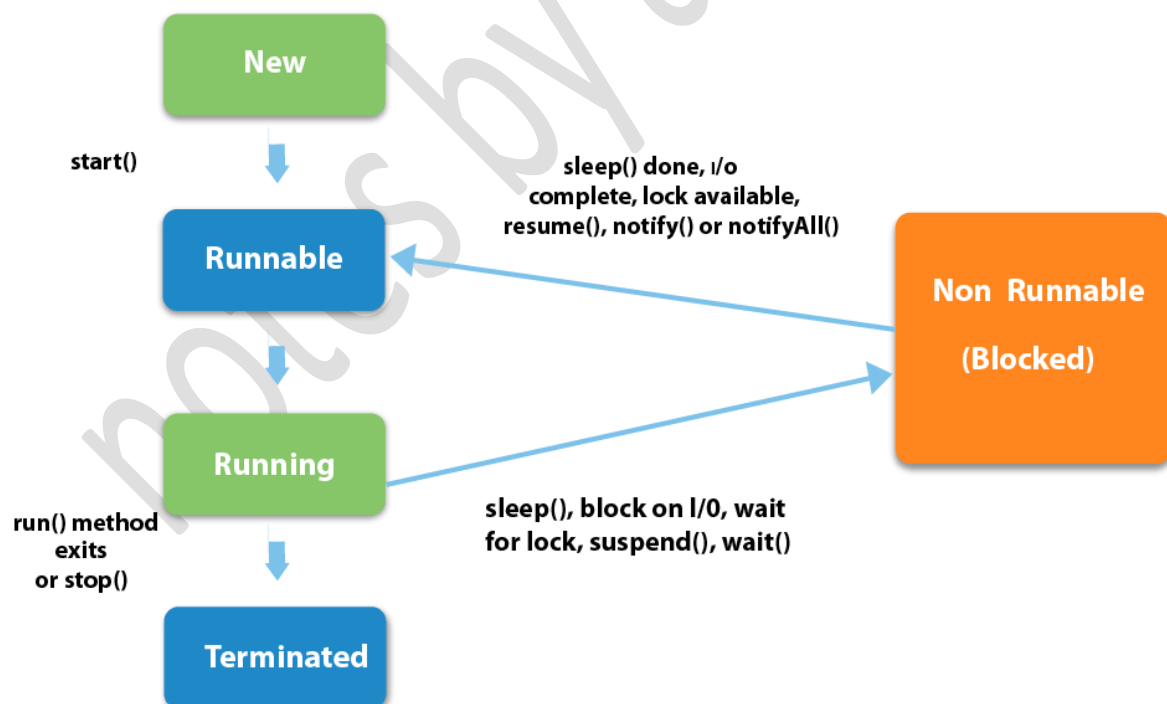Topic: Life cycle of a thread

Life cycle of a Thread (Thread States)

A thread can be in one of the five states. According to sun, there is only 4 states in **thread life cycle in java** new, runnable, non-runnable and terminated. There is no running state.

But for better understanding the threads, we are explaining it in the 5 states.

The life cycle of the thread in java is controlled by JVM. The java thread states are as follows:

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

1. New: The thread is in new state if we create an instance of Thread class but before the invocation of start() method.

2. 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.

3. Running: The thread is in running state if the thread scheduler has selected it.

4. Non-Runnable (Blocked): This is the state when the thread is still alive, but is currently not eligible to run.

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