**LIFE CYCLE OF A THREAD**

There are 5 states in thread life cycle.

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

The thread is in **new state** if we create an instance of Thread class but before the invocation of **start()**  method. After invocation of **start()** method, thread goes in **runnable state.**  But the thread scheduler has not selected it to be in running state.

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

When the thread is alive, but is currently not eligible to run then it stays in the **non-runnable state** or **blocked state**.

Thread goes in **terminated** or **dead state** when its **run()** method exits.

There are certain methods which is used to move the thread from one state to another.

1. start() method sends thread from new state to runnable state.
2. When run() method exits or stop() method sends thread from running state to terminated state.
3. sleep(), block() on I/O, wait(), suspend() – These methods sends the thread from running state to non-runnable or block state.
4. When time of sleep() method is over, thread is sent back to runnable state from non-runnable state.

resume(), notify() and notifyAll() methods are used to send threads from non-runnable to runnable state.