5. Thread Lifecycle and States

Code:

public class ThreadLifecycleExample extends Thread {

@Override

public void run() {

System.out.println(Thread.currentThread().getName() + " - State: " +

Thread.currentThread().getState());

try {

Thread.sleep(2000); // Simulate waiting state

} catch (InterruptedException e) {

e.printStackTrace();

}

System.out.println(Thread.currentThread().getName() + " - State after

sleep: " + Thread.currentThread().getState());

}

public static void main(String[] args) {

ThreadLifecycleExample thread = new ThreadLifecycleExample();

System.out.println(thread.getName() + " - State before start: " +

thread.getState());

thread.start(); // Start the thread

System.out.println(thread.getName() + " - State after start: " +

thread.getState());

}

}

