Day - 8

Thread

Diff between yield , join, sleep method

PROPERTY	yield()	join()	sleep()
Purpose	To pause current executing thread to give the chance for remaining thread of same priority	If a thread want to wait until completing some other thread then we should got for join.	If a Thread do not want to perform any operation for a particular amount of time (pausing) got for sleep().
Static	YES	NO	YES
Is it overloaded	NO	YES	YES
Is it final	NO	YES	NO
Is it throw InterruptedException	NO	YES	YES
Is it native Method	YES	NO	sleep(long ms) -> native sleep(long ms, int nanosecond) -> No-Native

Diff between HashSet , LinkedHashSet, TreeSet

Wait	Sleep
This method belongs to Object Class	This method belongs to Thread Class
wait() method release the thread lock during Synchronisation	sleep() method does not release the thread lock during Synchronisation
This method only can be called from Synchronisation context	Synchronisation context not required to call sleep() method.
wait() is not static method	sleep() is static method

New/Born State — t.start() → **Ready/Runnable State** — If thread scheduler allocates CPU → **Running State** — If run() method completed → **Dead State**

Waiting state to get lock

1. If waiting thread got notification
2. If time expires
3. If waiting thread got interrupted

Waiting state

If waiting thread got locked

1. If the t2 completed
2. If time expires
3. If waiting thread got interrupted

Blocked for Joining

1. t2.join()
2. t2.join (100);
3. t2.join(1000,10)

1. obj.wait();
2. obj.wait (100);
3. obj.wait(1000,10)

New/Born State

t.start()

Ready/ Runnable State

yield()

If thread scheduler allocates CPU

Running State

If run() method completed

Dead State

t.stop()

Thread.sleep(100);
Thread.sleep(100,10)

If Time Expires
If sleeping thread got interrupted

Sleeping state

Suspended

Suspend state

If we call resume()