

S.N.	Modifier and Type	Method	Description
1)	void	<a href="#"><u>start()</u></a>	It is used to start the execution of the thread.
2)	void	<a href="#"><u>run()</u></a>	It is used to do an action for a thread.
3)	static void	<a href="#"><u>sleep()</u></a>	It sleeps a thread for the specified amount of time.
4)	static Thread	<a href="#"><u>currentThread()</u></a>	It returns a reference to the currently executing thread object.
5)	void	<a href="#"><u>join()</u></a>	It waits for a thread to die.
6)	int	<a href="#"><u>getPriority()</u></a>	It returns the priority of the thread.
7)	void	<a href="#"><u>setPriority()</u></a>	It changes the priority of the thread.
8)	String	<a href="#"><u>getName()</u></a>	It returns the name of the thread.
9)	void	<a href="#"><u>setName()</u></a>	It changes the name of the thread.

10)	long	<a href="#"><u>getId()</u></a>	It returns the id of the thread.
11)	boolean	<a href="#"><u>isAlive()</u></a>	It tests if the thread is alive.
12)	static void	<a href="#"><u>yield()</u></a>	It causes the currently executing thread object to pause and allow other threads to execute temporarily.
13)	void	<a href="#"><u>suspend()</u></a>	It is used to suspend the thread.
14)	void	<a href="#"><u>resume()</u></a>	It is used to resume the suspended thread.
15)	void	<a href="#"><u>stop()</u></a>	It is used to stop the thread.
16)	void	<a href="#"><u>destroy()</u></a>	It is used to destroy the thread group and all of its subgroups.

17)	boolean	<a href="#"><u>isDaemon()</u></a>	It tests if the thread is a daemon thread.
18)	void	<a href="#"><u>setDaemon()</u></a>	It marks the thread as daemon or user thread.
19)	void	<a href="#"><u>interrupt()</u></a>	It interrupts the thread.
20)	boolean	<a href="#"><u>isinterrupted()</u></a>	It tests whether the thread has been interrupted.
21)	static boolean	<a href="#"><u>interrupted()</u></a>	It tests whether the current thread has been interrupted.
22)	static int	<a href="#"><u>activeCount()</u></a>	It returns the number of active threads in the current thread's thread group.
23)	void	<a href="#"><u>checkAccess()</u></a>	It determines if the currently running thread has permission to

			modify the thread.
24)	static boolean	<a href="#"><u>holdLock()</u></a>	It returns true if and only if the current thread holds the monitor lock on the specified object.
25)	static void	<a href="#"><u>dumpStack()</u></a>	It is used to print a stack trace of the current thread to the standard error stream.
26)	StackTraceElement[]	<a href="#"><u>getStackTrace()</u></a>	It returns an array of stack trace elements representing the stack dump of the thread.
27)	static int	<a href="#"><u>enumerate()</u></a>	It is used to copy every active thread's thread group and its subgroup into

			the specified array.
28)	Thread.State	<a href="#"><u>getState()</u></a>	It is used to return the state of the thread.
29)	ThreadGroup	<a href="#"><u>getThreadGroup()</u></a>	It is used to return the thread group to which this thread belongs
30)	String	<a href="#"><u>toString()</u></a>	It is used to return a string representation of this thread, including the thread's name, priority, and thread group.
31)	void	<a href="#"><u>notify()</u></a>	It is used to give the notification for only one thread which is waiting for a particular object.

32)	void	<a href="#"><u>notifyAll()</u></a>	It is used to give the notification to all waiting threads of a particular object.
33)	void	<a href="#"><u>setContextClassLoader()</u></a>	It sets the context ClassLoader for the Thread.
34)	ClassLoader	<a href="#"><u>getContextClassLoader()</u></a>	It returns the context ClassLoader for the thread.
35)	static Thread.UncaughtExceptionHandler	<a href="#"><u>getDefaultUncaughtExceptionHandler()</u></a>	It returns the default handler invoked when a thread abruptly terminates due to an uncaught exception.
36)	static void	<a href="#"><u>setDefaultUncaughtExceptionHandler()</u></a>	It sets the default handler invoked when a thread abruptly

			terminates due to an uncaught exception.
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## 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 you 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.

