In most cases, thread scheduler schedules the threads according to their priority (known as preemptive scheduling). But it is not guaranteed because it depends on JVM specification that which scheduling it chooses. 3 constants defined in Thread class:

1. public static int *MIN\_PRIORITY*
2. public static int *NORM\_PRIORITY*
3. public static int *MAX\_PRIORITY* Default priority of a thread is 5 (*NORM\_PRIORITY*). The value of *MIN\_PRIORITY*is 1 and the value of *MAX\_PRIORITY*is 10.

**setPriority(int newPriority) Method Overview**

* *setPriority(int newPriority)* - changes the priority of this thread.

First, the checkAccess method of this thread is called with no arguments. This may result in throwing a *SecurityException*.

Otherwise, the priority of this thread is set to the smaller of the specified *newPriority* and the maximum permitted priority of the thread's thread group.

**Parameters:** *newPriority* priority to set this thread to.

**Throws:**  *IllegalArgumentException*- If the priority is not in the range *MIN\_PRIORITY*to *MAX\_PRIORITY*. *SecurityException*- if the current thread cannot modify this thread.

**Set Priority to a Thread Example**

public class ThreadPriorityExample {

public static void main(final String[] args) {

final Runnable runnable = () -> {

System.out.println("Running thread name : " + Thread.currentThread().getName() +

" and it's priority : " + Thread.currentThread().getPriority());

};

final Thread thread1 = new Thread(runnable);

final Thread thread2 = new Thread(runnable);

final Thread thread3 = new Thread(runnable);

final Thread thread4 = new Thread(runnable);

thread1.setPriority(Thread.MIN\_PRIORITY);

thread2.setPriority(Thread.NORM\_PRIORITY);

thread3.setPriority(Thread.MAX\_PRIORITY);

thread4.setPriority(2);

thread1.start();

thread2.start();

thread3.start();

thread4.start();

}

}

Output:

Running thread name : Thread-0 and it's priority : 1

Running thread name : Thread-1 and it's priority : 5

Running thread name : Thread-2 and it's priority : 10

Running thread name : Thread-3 and it's priority : 2