

JAVA.LANG.THREADGROUP.SETMAXPRIORITY METHOD

http://www.tutorialspoint.com/java/lang/threadgroup_setmaxpriority.htm

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Description

The **java.lang.ThreadGroup.setMaxPriority** method sets the maximum priority of the group. Threads in the thread group that already have a higher priority are not affected.

Declaration

Following is the declaration for **java.lang.ThreadGroup.setMaxPriority** method

```
public final void setMaxPriority(int pri)
```

Parameters

- **pri** -- This is the new priority of the thread group.

Return Value

This method does not return any value.

Exception

- **SecurityException** -- if the current thread cannot modify this thread group.

Example

The following example shows the usage of java.lang.ThreadGroup.setMaxPriority method.

```
package com.tutorialspoint;

import java.lang.*;

public class ThreadGroupDemo implements Runnable
{
    public static void main(String[] args) {
        ThreadGroupDemo tg = new ThreadGroupDemo();
        tg.func();
    }

    public void func() {
        try {
            // create a parent ThreadGroup
            ThreadGroup pGroup = new ThreadGroup("Parent ThreadGroup");
            // set maximum priority as 8 for Parent
            pGroup.setMaxPriority(Thread.MAX_PRIORITY - 2);

            // create a child ThreadGroup for parent ThreadGroup
            ThreadGroup cGroup = new ThreadGroup(pGroup, "Child ThreadGroup");
            // set maximum priority as 5 for child
            cGroup.setMaxPriority(Thread.NORM_PRIORITY);

            // create a thread with Priority as MAX
            Thread t1 = new Thread(pGroup, this);
            t1.setPriority(Thread.MAX_PRIORITY);
            System.out.println("Starting " + t1.getName() + "...");
            t1.start();

            // create another thread with Priority as MAX
            Thread t2 = new Thread(cGroup, this);
            t1.setPriority(Thread.MAX_PRIORITY);
            System.out.println("Starting " + t2.getName() + "...");
            t2.start();
        }
    }
}
```

```

        // display the number of active threads with actual priority
        System.out.println("Active threads in \"" + pGroup.getName()
        + "\" = " + pGroup.activeCount());

        // block until the other threads finish
        t1.join();
        t2.join();
    }
    catch (InterruptedException ex) {
        System.out.println(ex.toString());
    }
}

// implements run()
public void run() {

    for(int i = 0; i < 1000; i++) {
        i++;
    }
    System.out.println(Thread.currentThread().getName() +
    " [priority = " + Thread.currentThread().getPriority() +
    "]" finished executing.");
}
}

```

Let us compile and run the above program, this will produce the following result:

```

Starting Thread-0...
Starting Thread-1...
Active threads in group "Parent ThreadGroup" = 2
Thread-0 [priority = 8] finished executing.
Thread-1 [priority = 5] finished executing.

```

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