

JAVA EXAMPLES - INTERRUPT A THREAD

http://www.tutorialspoint.com/javaexamples/thread_interrupt.htm

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Problem Description:

How to interrupt a running Thread?

Solution:

Following example demonstrates how to interrupt a running thread interrupt method of thread and check if a thread is interrupted using isInterrupted method.

```
public class GeneralInterrupt extends Object
implements Runnable {
    public void run() {
        try {
            System.out.println("in run() -
            about to work2()");
            work2();
            System.out.println("in run() -
            back from work2()");
        }
        catch (InterruptedException x) {
            System.out.println("in run() -
            interrupted in work2()");
            return;
        }
        System.out.println("in run() -
        doing stuff after nap");
        System.out.println("in run() -
        leaving normally");
    }
    public void work2() throws InterruptedException {
        while (true) {
            if (Thread.currentThread().isInterrupted()) {
                System.out.println("C isInterrupted()="
                + Thread.currentThread().isInterrupted());
                Thread.sleep(2000);
                System.out.println("D isInterrupted()="
                + Thread.currentThread().isInterrupted());
            }
        }
    }
    public void work() throws InterruptedException {
        while (true) {
            for (int i = 0; i < 100000; i++) {
                int j = i * 2;
            }
            System.out.println("A isInterrupted()="
            + Thread.currentThread().isInterrupted());
            if (Thread.interrupted()) {
                System.out.println("B isInterrupted()="
                + Thread.currentThread().isInterrupted());
                throw new InterruptedException();
            }
        }
    }
    public static void main(String[] args) {
        GeneralInterrupt si = new GeneralInterrupt();
        Thread t = new Thread(si);
        t.start();
        try {
            Thread.sleep(2000);
        }
        catch (InterruptedException x) {
        }
    }
}
```

```
System.out.println("in main() -  
interrupting other thread");  
t.interrupt();  
System.out.println("in main() - leaving");  
}  
}
```

Result:

The above code sample will produce the following result.

```
in run() - about to work2()  
in main() - interrupting other thread  
in main() - leaving  
C isInterrupted()=true  
in run() - interrupted in work2()
```

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