JAVA.LANG.THREADGROUP.ENUMERATE METHOD

Description

The **java.lang.ThreadGroup.enumerate*Thread[]list*** method copies into the specified array every active thread in this thread group and its subgroups.

Declaration

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

```
public int enumerate(Thread[] list)
```

Parameters

- **list** -- This is an array into which to place the list of threads.

Return Value

This method returns the number of threads put into the array.

Exception

- **SecurityException** -- if the current thread does not have permission to enumerate this thread group.

Example

The following example shows the usage of java.lang.ThreadGroup.enumerate 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");

         // create a child ThreadGroup for parent ThreadGroup
         ThreadGroup cGroup = new ThreadGroup(pGroup, "Child ThreadGroup");

         // create a thread
         Thread t1 = new Thread(pGroup, this);
         System.out.println("Starting " + t1.getName() + "...");
         t1.start();

         // create another thread
         Thread t2 = new Thread(cGroup, this);
         System.out.println("Starting " + t2.getName() + "...");
         t2.start();

         // returns the number of threads put into the array
         Thread[] list = new Thread[pGroup.activeCount()];
         int count = pGroup.enumerate(list);
         for (int i = 0; i < count; i++) {
```

```
            System.out.println("Thread " + list[i].getName() + " found");
         }

         // 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() +
      " finished executing.");
   }
}
```

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

```
Starting Thread-0...
Starting Thread-1...
Thread Thread-0 found
Thread Thread-1 found
Thread-0 finished executing.
Thread-1 finished executing.
```