S.No: 26	Exp. Name: ***Write a Java program to illustrate Daemon Threads***	Date:2023-09-25

Aim:

Daemon thread is a low priority thread (in the context of **JVM**) that runs in background to perform tasks such as garbage collection etc., they do not prevent the **JVM** from exiting when all the user threads finish their execution.

JVM terminates itself when all user threads finish their execution, even while Daemon threads are running.

The code `Thread.currentThread().isDaemon()` will return `true`, if the current thread **is a daemon** thread and `false` if it **is not a daemon** thread.

Write a Java program to illustrate **daemon threads**.

Write a class `DeamonThreadDemo` which extends the `Thread` class. Override its **run()** method to check whether the current thread is either **daemon** or **user thread** and print **"This is daemon thread"** and **"This is not a daemon thread"** respectively.

Write the **main()** method in the class `DeamonThreadDemo`, which create three instances of class `DaemonThreadDemo` as `t1`, `t2` and `t3` and perform the below tasks in the given order:

1. invoke the `setDaemon()` method on `t1` instance and pass **true** as the argument to set `t1` as a daemon thread.
2. Invoke `start()` method on `t1`, `t2` and `t3` respectively.

Note: Please don't change the package name.

Source Code:

q11351/DaemonThreadDemo.java

```
package q11351;
public class DaemonThreadDemo extends Thread {
   public void run() {
      if (Thread.currentThread().isDaemon() ) {
         System.out.println("This is daemon thread");
      } else {
         System.out.println("This is not a daemon thread");
      }
   }
   public static void main(String[] args) {
      DaemonThreadDemo t1 = new DaemonThreadDemo();
      DaemonThreadDemo t2 = new DaemonThreadDemo();
      DaemonThreadDemo t3 = new DaemonThreadDemo();

      t1.setDaemon(true);

      t1.start();
      t2.start();
      t3.start();
   }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
This is daemon thread
This is not a daemon thread
This is not a daemon thread