2022-2026-CSE-B

Aim:

Write a Java program that uses three threads to perform the below actions:

- 1. First thread should print "Good morning" for every 1 second for 2 times
- 2. Second thread should print "Hello" for every 1 seconds for 2 times
- 3. Third thread should print "Welcome" for every 3 seconds for 1 times

Write appropriate **constructor** in the Printer class which implements Runnable interface to take three arguments: **message**, **delay** and count of types **String**, **int** and **int** respectively.

Write code in the Printer.run() method to print the **message** with appropriate **delay** and for number of times mentioned in **count**.

Write a class called ThreadDemo with the main() method which instantiates and executes three instances of the above mentioned Printer class as threads to produce the desired output.

```
[Note: If you want to sleep for 2 seconds you should call Thread.sleep(2000); as the Thread.sleep(...) method takes milliseconds as argument.]
```

Note: Please don't change the package name.

Source Code:

```
q11349/ThreadDemo.java
package q11349;
public class ThreadDemo {
      public static void main(String[] args) throws Exception {
               Thread t1 = new Thread(new Printer("Good morning", 1, 2));
               Thread t2 = new Thread(new Printer("Hello", 1, 2));
               Thread t3 = new Thread(new Printer("Welcome", 3, 1));
               t1.start();
               t2.start();
               t3.start();
               t1.join();
               t2.join();
               t3.join();
               System.out.println("All the three threads t1, t2 and t3 have co
mpleted execution.");
      }
```

```
class Printer implements Runnable {
      private String message;
      private int delay,count;
      public Printer(String message,int delay,int count) {
               this.message = message;
               this.delay=delay;
               this.count=count;
      }
      public void run() {
               //long value =delay*1000;
               for (int i = 0; i < count; i++) {
                           //Thread.sleep(value);
                           System.out.println(message);
               }
      }
```

}

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Good morning
Hello
Welcome
Good morning
Hello
All the three threads t1, t2 and t3 have completed execution.