S.No: 25	Exp. Name: *Write a Java program demonstrating the usage of Threads*	Date:2023-12-21

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

```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 completed
execution.");

    }

}
```

```java
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.