

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 completed 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.