S.No: 25	Exp. Name: *Write a Java program demonstrating the usage of Threads*	Date:2023-12-23

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 e
xecution.");
    }
}
class Printer implements Runnable {
    public String name;
    public int rep;
    public int delay;
    public Printer(String name,int delay,int rep){
        this.name=name;
        this.delay=delay;
        this.rep=rep;
    }
    public void run(){
        for(int i=0;i<rep;i++){
            System.out.println(name);
```

```
        }catch(Exception e){
            e.printStackTrace();
        }
    }
    }
}
```

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.