

1.Problem Statement

Write a simple Timer that can periodically print a timeout message

2.Source code

```
//Simple Timer that can periodically print a timeout message.

package mypackage;
import java.util.Timer;
import java.util.TimerTask;

public class TimerDemo {
    Timer timer;

    //Creation of constructor to initialize the seconds.
    TimerDemo(int secs)
    {
        //Creating timer object
        timer=new Timer();
        //Scheduling a task to delay in milliseconds using
schedule method
        timer.schedule(new Task(),secs*1000);

    }

    //Creating subclass for TimerTask
    class Task extends TimerTask
    {
        public void run()
        {
            System.out.println("Time over");
            timer.cancel();
        }
    }

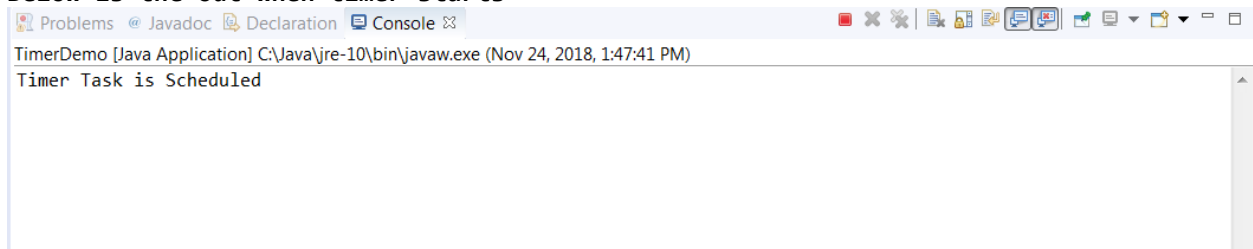
    //Declaraion of main method
    public static void main(String[] args)
    {
        //instantiating object and passing the argument in seconds
        new TimerDemo(12);
        System.out.println("Timer Task is Scheduled");
    }

}

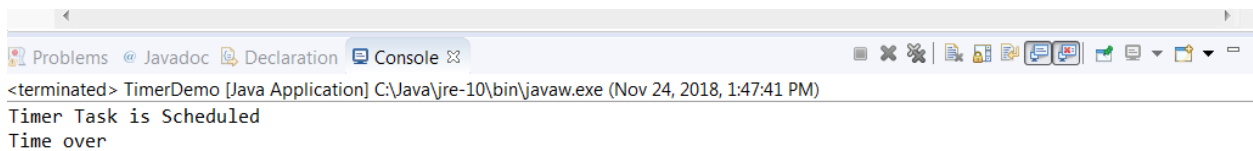
} //End program
```

3.Output

Below is the out when timer starts

A screenshot of an IDE's console window. The title bar shows 'Problems', 'Javadoc', 'Declaration', and 'Console'. The console text reads: 'TimerDemo [Java Application] C:\Java\jre-10\bin\javaw.exe (Nov 24, 2018, 1:47:41 PM)' followed by 'Timer Task is Scheduled' on the next line. The console has a scrollbar on the right.

Below is the output when the timer period of 12000 milli seconds over.

A screenshot of an IDE's console window. The title bar shows 'Problems', 'Javadoc', 'Declaration', and 'Console'. The console text reads: '<terminated> TimerDemo [Java Application] C:\Java\jre-10\bin\javaw.exe (Nov 24, 2018, 1:47:41 PM)' followed by 'Timer Task is Scheduled' and 'Time over' on the next two lines. The console has a scrollbar on the right.

4.Flow Information

A subclass Task is created by extending TimerTask and defined with run() method to perform the task.

A thread is created by using Timer class and instantiated the Task object by calling Schedule method that takes the first parameter for timer task and the second parameter as delay in 12000 milliseconds.

Under the main method ,TimerDemo object is created by passing the number of seconds.

Finally ,the out put is displayed by indicating that time is over.