

## Program 9: Diamond problem using oops concept

```
package mounika9;

import java.io.*;

import java.util.*;

class Sender

{

    public void send(String msg)

    {

        System.out.println("Sending\t" + msg );

        try

        {

            Thread.sleep(1000);

        }

        catch (Exception e)

        {

            System.out.println("Thread interrupted.");

        }

        System.out.println("\n" + msg + "Sent");

    }

}
```

```
class ThreadedSend extends Thread
{
    private String msg;
    private Thread t;
    Sender sender;
    ThreadedSend(String m, Sender obj)
    {
        msg = m;
        sender = obj;
    }

    public void run()
    {
        synchronized(sender)
        {
            sender.send(msg);
        }
    }
}

class SyncDemo
```

```
{  
  
    public static void main(String args[])  
    {  
        Sender snd = new Sender();  
        ThreadedSend S1 =  
            new ThreadedSend( " Hi " , snd );  
        ThreadedSend S2 =  
            new ThreadedSend( " Bye " , snd );  
        S1.start();  
        S2.start();  
        try  
        {  
            S1.join();  
            S2.join();  
        }  
        catch(Exception e)  
        {  
            System.out.println("Interrupted");  
        }  
    }  
}
```

}

