**3.**Writing a program in Java to demonstrate synchronization

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");

}

}

}

**Output:**

