Writing a program in Java to demonstrate synchronization

```java
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()
```

```java
    {
        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");
        }
    }
}
```

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Package Explorer

- First
  - JRE System Library [JavaSE-17]
  - src
    - (default package)
    - p1
    - p2
    - p3
      - FirstSort.java
      - MyRunnableThread.java
      - MyThread.java
      - SleepAndWait.java
      - SynchronisationDemo.java

Boot Dashboard

Type tags, projects, or working set names to match (incl. * and ? wild

- local

CopyFile.java   Colleg.java   FirstSort.java   SleepAndWait.java   MyThread.java   MyRunnable1

```java
 1  package p3;
 2
 3  import java.io.*;
 4  import java.util.*;
 5
 6  class Sender {
 7      public void send(String msg) {
 8          System.out.println("Sending\t" + msg);
 9          try {
10              Thread.sleep(1000);
11          } catch (Exception e) {
12              System.out.println("Thread  interrupted.");
13          }
14          System.out.println("\n" + msg + "Sent");
15      }
16  }
17
18  class ThreadedSend extends Thread {
19      private String msg;
20      private Thread t;
21      Sender sender;
22
23      ThreadedSend(String m, Sender obj) {
24          msg = m;
25          sender = obj;
26      }
27
28      public void run() {
29          synchronized (sender) {
30              sender.send(msg);
31          }
32      }
33  }
34
35  class SynchronisationDemo {
36      public static void main(String args[]) {
37          Sender snd = new Sender();
38          ThreadedSend S1 = new ThreadedSend(" Hello ", snd);
39          ThreadedSend S2 = new ThreadedSend(" How are you ", snd);
40          S1.start();
41          S2.start();
42          try {
43              S1.join();
```

Problems   Javadoc   Declaration   Console

<terminated> SynchronisationDemo [Java Application] C:\Users\saibh\Downloads\sts-4.1

```
Sending  How are you

 How are you Sent
Sending  Hello

 Hello Sent
```

24°C
Mostly clear

ENG
IN

15:35
02-08-2022