Demonstrate Inter process Communication and deadlock

```
class printer{
    String str;
    printer()
    {
        str="";
    }
    synchronized void print(String str)
    {
        System.out.print("["+str);
        try {
            Thread.sleep(1000);
        }catch(InterruptedException e)
        {
            System.out.println("Error occured");
        }
        try {
            System.out.println("]");
            Thread.sleep(1000);
        } catch (InterruptedException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }

    }
}
class SampleThread implements Runnable
{
    String msg;
    printer pt;
    Thread t;
    public SampleThread(printer pr,String message)
    {
        pt=pr;
        msg=message;
        t=new Thread(this);
        t.start();
    }

    @Override
    public void run() {
        // TODO Auto-generated method stub
        pt.print(msg);
    }

}
class InterThread {
    public static void main(String[] args) {
        printer pt=new printer();
        SampleThread s1=new SampleThread(pt,"HELLO");
        SampleThread s2=new SampleThread(pt,"CSE");
        SampleThread s3=new SampleThread(pt,"WORLD");
        SampleThread s4=new SampleThread(pt,"BMS");

        try {
            s1.t.join();
            s2.t.join();
            s3.t.join();
            s4.t.join();
        } catch (InterruptedException e) {
```

```
            // TODO Auto-generated catch block
            e.printStackTrace();
        }
    }
}
```

Output

```
[HELLO]
[BMS]
[WORLD]
[CSE]
```