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
```

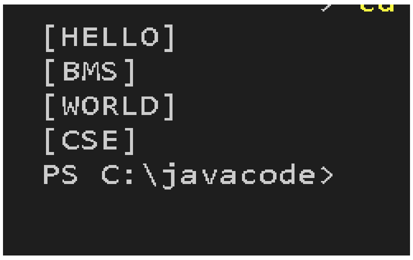
```
{
        String msg;
printer pt;     Thread t;
        public SampleThread(printer pr,String message)
        {
                pt=pr;
msg=message;
                t=new Thread(this);
t.start();
        }

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

}
public 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]
PS C:\javacode>
```