

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:

```
C:\Users\admin\OneDrive\Desktop\awt>java InterThread
[HELLO]
[BMS]
[WORLD]
[CSE]
C:\Users\admin\OneDrive\Desktop\awt>
```


