Program 11:

Demonstrate Inter process Communication and deadlock.

```java
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
{
```

```java
		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();
```
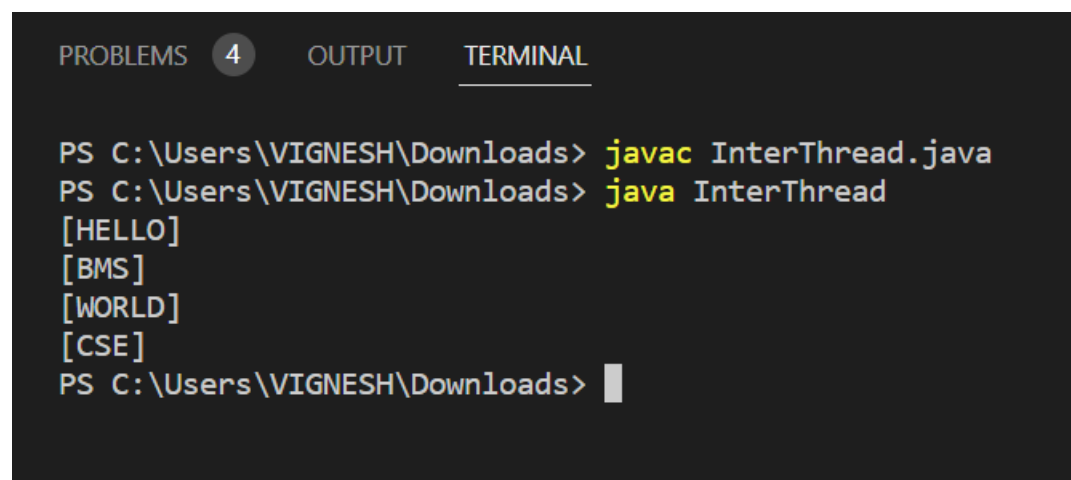
```
                    s4.t.join();

            } catch (InterruptedException e) {

                    // TODO Auto-generated catch block

                    e.printStackTrace();

            }

        }

}
```

OUTPUT: